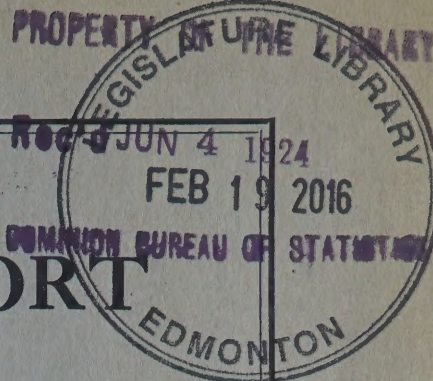


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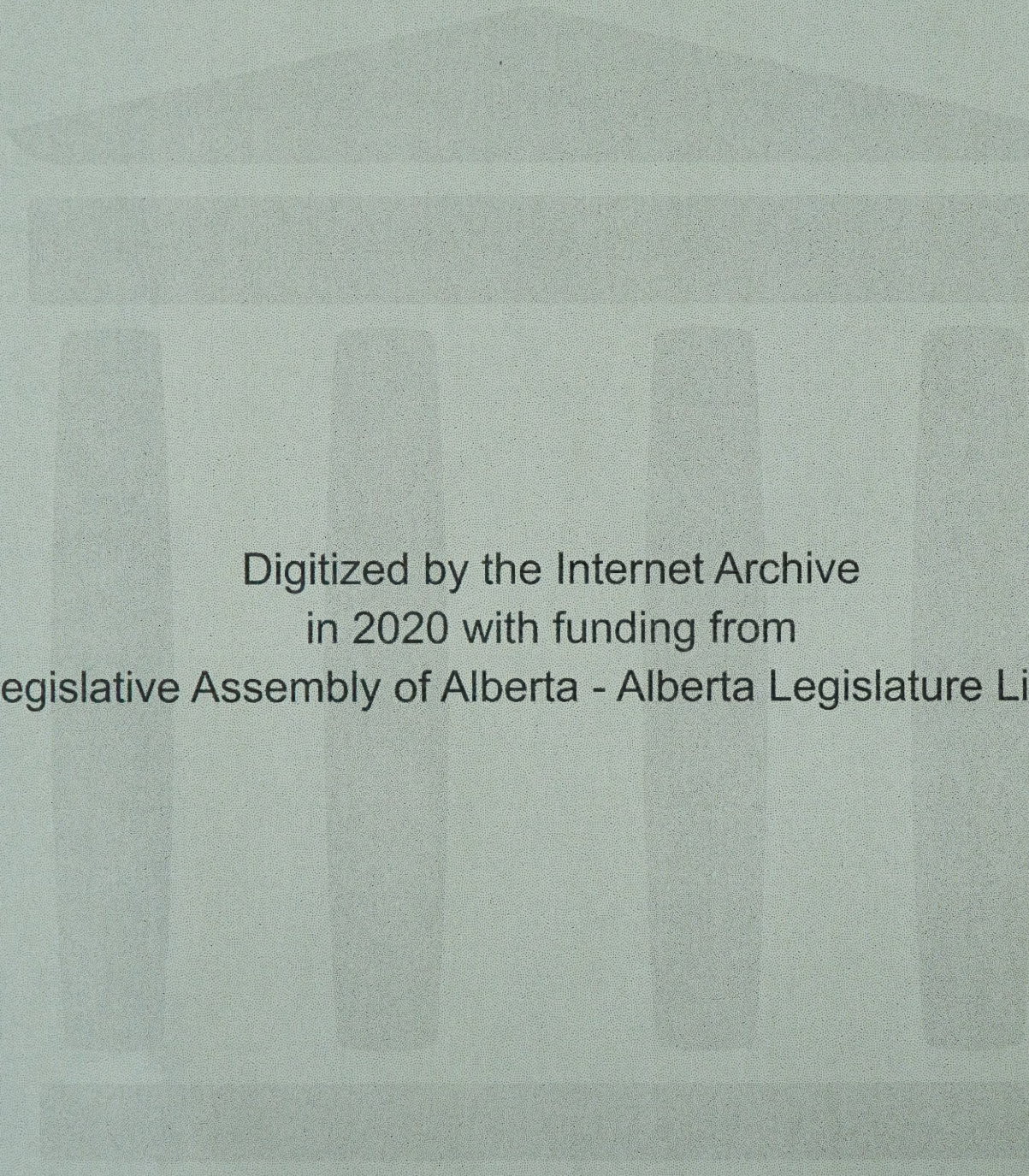


ANNUAL REPORT
OF THE
DEPARTMENT OF PUBLIC HEALTH
OF THE
PROVINCE OF ALBERTA
1922

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



EDMONTON:
PRINTED BY J. W. JEFFERY, KING'S PRINTER
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Edmonton, February 8th, 1923.

To His Honour

ROBERT GEORGE BRETT,

Lieutenant-Governor of the Province of Alberta.

SIR,—

I have the honour to transmit herewith the Annual Report of the Department of Public Health for the year 1922.

I have the honour to be, Sir,

Your obedient servant,

R. G. REID,
Minister of Health.

REPORT OF THE DEPARTMENT OF PUBLIC HEALTH

SIR,—

I have the honour to submit the Fourth Annual Report of the Department of Public Health.

The administration of the Provincial Mental Hospital at Ponoka and of the Home for the Mentally Deficient at Edmonton was added to this Department during the year.

The Mental Hospital at Ponoka was transferred from the Department of Public Works in so far as the administration of the Hospital as a Mental Hospital is concerned. The farm was transferred to the Department of Agriculture, the Department of Public Works retaining the public utilities, that is, the water supply, heating, lighting, etc.

In order to carry on the administration successfully, the closest co-operation between the Departments is necessary, and I am glad to say that throughout the year this system of management has been successful. The Department of Public Works and the Department of Agriculture have realized that the utilities and the farm are maintained primarily for the benefit of the patients, and it has not been difficult to co-ordinate the various services.

The Home and Training School for Mental Defectives was transferred from the Department of Education. A small Home is at present established at South Edmonton, and has been in operation there for some years pending the completion of the new Home. The ground selected for this Home is at Oliver, some nine miles from the centre of the city. During the past year, two units of the proposed institution were begun and practically completed. It is expected that early in the year 1923 these will be ready for occupation, and provision has been made in them for the accommodation of 200 patients. An infirmary, service building and nurses' home are planned for the coming year.

In the fall, Dr. W. J. McAlister was appointed Superintendent, and was sent to the Eastern States to study the method of administration and training in connection with the Training Schools there. Dr. McAlister spent two months with Dr. Fernald at the Massachusetts Training School for the Feeble-minded. The Massachusetts School is one of the oldest on the continent, and Dr. Fernald has been a pioneer in developing the training and care of the mentally deficient.

The reports of the various branches are submitted. Each branch shows considerable growth over last year.

In presenting these reports I shall make a few comments on each.

THE REPORT OF THE PROVINCIAL SANITARY ENGINEER.

Financial considerations have prevented the installation of large engineering projects. Only absolutely necessary work has been undertaken by the municipalities. All such work is passed on by the

Sanitary Engineer, who advises the Board as to the feasibility of any scheme.

The work of the Sanitary Inspectors is of great value, and their advice and assistance is constantly being demanded by the smaller municipalities.

THE REPORT OF THE PROVINCIAL BACTERIOLOGIST.

The Provincial Laboratory continues to grow, and is becoming each year more useful to the medical practitioners of the Province. It is felt that further advancement in this work should be planned, and arrangements should be made for the establishment of a laboratory at some point in the southern part of the Province. At present, specimens forwarded from the southern part of the Province, and of which examination is urgent, have been delayed for two or three days on account of poor train connections. A laboratory established in the South would be of great assistance to the physicians of that area.

THE REPORT OF THE PUBLIC HEALTH NURSING BRANCH

Miss Clark, who took over this work in the fall of 1921, has done excellent work throughout the year.

I would especially call your attention to the work of the lecturing nurses, and the number of people who were reached.

The itineraries were arranged through the Women's Institutes, the U. F. W. A. and the Extension Department of the University. Health films were largely used and proved a great attraction.

During the year films were taken of the Central Alberta Sanatorium, with the object of familiarizing the people with the work being done there.

THE REPORT OF THE HOSPITALS BRANCH.

The same conditions prevail which retarded the expansion of this service in the previous year. It is hoped that as soon as financial conditions adjust themselves there will be a large increase in the number of Municipal Hospitals. The Municipal Hospital Act has now been in force for four years, and the existing Municipal Hospitals have demonstrated the value to the public of this method of organizing and maintaining hospitals.

During the year the Secretary of the Municipal Hospitals Branch was appointed Supervisor of Organization, and more extensive duties were given to him. He was asked to supervise the financial condition of all hospitals in the Province, and, where requested, to advise the hospital boards, so that the cost of service might be reduced to a reasonable figure. The Council of the City of Red Deer requested the services of the Supervisor in connection with the Red Deer Hospital, and the results obtained have been very gratifying, both to the City of Red Deer and to this Department.

The services of this branch are at the disposal of any hospital board at any time.

THE REPORT OF THE VENEREAL DISEASES BRANCH.

Dr. Harold Orr, the Director of this branch, was granted a year's leave of absence on December 1st, in order to proceed to England to study at the London Hospital. During his absence, Dr. Emerson Smith has been temporarily appointed to undertake this work.

The Dominion Government have decided to continue the Dominion subsidy for a further period; they consider that the work accomplished by the various Provinces is of great value and should be continued.

I have had an opportunity of examining the Clinics in other Provinces, and the work in the Province of Alberta is second to none.

THE REPORT OF THE VITAL STATISTICS BRANCH.

An interim report of the Deputy Registrar General is submitted. I desire especially to call your attention to the able and energetic administration of the Deputy Registrar General and the excellent work of his branch.

All of which is respectfully submitted.

W. C. LAIDLAW,
Deputy Minister.

HON R. G. REID, ESQ.,
Minister of Health.

REPORT OF THE PROVINCIAL BOARD OF HEALTH

SIR,—

I have the honour to submit the Annual Report of the Provincial Board of Health.

The Provincial Board met at various times throughout the year and dealt with such questions as were brought before it.

Various Regulations prepared by the Provincial Sanitary Engineer were considered by the Board and submitted to the Lieutenant-Governor-in-Council. It is the intention to thoroughly revise the Provincial Health Regulations. A good deal of this work has already been finished and awaits the sanction of the Lieutenant Governor.

In June the Provincial Medical Officer of Health proceeded to Ottawa to attend the meeting of the Dominion Council of Health, and also attended the meeting of the Canadian Public Health Association at St. Johns, N. B. Dr. Laidlaw was elected President of the Canadian Public Health Association at that meeting. The next meeting will be in Edmonton in June next.

In the fall of 1921 Dr. Barrow undertook the work of medical relief in the South, and established his headquarters at Lethbridge. He was engaged in this work until the summer of 1922. During that time, Dr. W. J. McAlister undertook the work of inspection under the Provincial Board. Dr. Barrow returned to this work and Dr. McAlister was appointed Superintendent of the Home for Mentally Deficient.

Mr. W. W. Bell was again attached to the staff during the summer vacation and appointed an executive officer of the Provincial Board. As in the previous summer, he travelled extensively throughout the sparsely settled parts of the country, visiting all the Indian reserves and many outlying points, reporting to the Provincial Board on the conditions in those places.

INFECTIOUS AND COMMUNICABLE DISEASES.

There has been a decrease in the number of cases reported during the year 1922. I should, however, point out that it is considered that but a small percentage of the infectious diseases are being reported throughout the country; that unless a serious outbreak occurs, many cases are never reported. A serious outbreak of smallpox is usually quickly reported and stamped out. Scarlet fever, sore throat and other diseases are too often looked upon as necessary for children and are not reported.

In scarlet fever the death-rate in cities is 1.73 per cent. to cases reported; in rural districts, the percentage of deaths to cases reported was 12.6 per cent. In cities with an active health organization and easy means of communication practically all cases are reported. The death-rate of 1.73 per cent. is exceedingly low, and probably a good deal lower than that which occurs in the country, on account of early diagnosis and, therefore, early treatment.

STATISTICAL TABLE.

DISEASE	1922	1921
Diphtheria.....	730	978
Scarlet Fever.....	1,002	1,592
Smallpox.....	68	1,043
Typhoid Fever.....	169	177
Chickenpox.....	1,003	1,665
Infantile Paralysis.....	15	1
Lethargic Encephalitis.....	1	2
Measles.....	2,811	1,416
Mumps.....	286	2,738
Tuberculosis.....	124	56
Whooping Cough.....	314	194
Other Diseases.....	38	54

SMALLPOX.

Sixty-eight cases were reported in 1922, without any deaths. There were small outbreaks in the Municipal Districts of Lakeview and Carbon.

TYPHOID FEVER.

One hundred and sixty-nine cases were reported with 50 deaths. Last year 177 cases were reported with 65 deaths. The death-rate in typhoid fever is about 10 per cent. Based on the normal death-rate, 500 cases of typhoid fever occurred in the Province. Last year the death-rate was 65, which would give 650 cases in 1921.

Of 169 cases reported, 51 occurred in the cities, the balance in the rural districts.

It is generally conceded that the incidence of diseases, especially typhoid fever, is less in cities than in the country.

There was a considerable outbreak of typhoid fever at St. Paul des Metis and also at Viking.

General inoculation for typhoid fever has been advocated, and its benefits cannot be too much emphasized.

DIPHTHERIA.

Seven hundred and thirty cases were reported with 121 deaths. Again, I would point out the difference between the cities and the rural communities: 452 cases reported from cities, with 31 deaths, 6.8 per cent.; 278 cases reported from the country, with 90 deaths, 32 per cent.

The average death-rate from diphtheria depends entirely on the treatment used. Practically all cases treated on the first day of the disease with antitoxin recover; the longer the treatment is delayed, the more danger there is to the patient.

The following figures show the progressive death-rate:

Day of disease on which antitoxin was given	Death-rate per cent.
1st day	0.32
2nd day	1.66
3rd day	3.64
4th day	11.03
Later	21.08

A supply of antitoxin is at all times maintained in the Provincial Laboratory, with sub-stations at Calgary, Lethbridge and Medicine Hat. Each local Board of Health is expected to keep a supply of vaccine for use in its health district, and it is urged that this should be done, and that every case of suspicious sore throat should be treated with antitoxin.

Antitoxin may be obtained from the Provincial Laboratory at cost, as follows:

1,000 units	\$ 0.30	5,000 units	\$ 0.95
2,000 units .....	.50	10,000 units	1.70
3,000 units .....	.65	20,000 units	3.20

SCARLET FEVER.

One thousand and two cases were reported with 51 deaths. As stated before, unless the type of the disease is very severe all cases are not reported. Three per cent. is the usual death-rate of ordinary uncomplicated cases of scarlet fever. Many cases of this disease are so mild that they are not recognized by the friends of the patient; these cases, however, are just as contagious as a severe attack of scarlet fever.

TUBERCULOSIS.

Two hundred and ninety-eight deaths were reported in the Province during the year from tuberculosis.

The Central Alberta Sanatorium, which was opened in December, 1920, had, at the end of 1922, 89 civilian patients. Extra accommodation is being arranged for; it is expected that another pavilion will be changed into an infirmary, accommodating some 30 more bed cases. Patients are admitted to the Sanatorium on the advice of the Superintendent. The municipality from which each patient comes is responsible to the Government for the maintenance of the patient at the rate of \$3.00 per day, the Provincial Government being responsible to the Dominion Government for the actual cost of the patients in the institution. The institution is operated by the Dominion Government, and there has been a considerable decrease in the per capita cost throughout the year, the last returns from the Dominion Government showing the per capita cost to be approximately \$3.11 per day.

The question of the treatment of surgical tuberculosis, especially in children, has been much discussed. The Red Cross opened a small hospital in Calgary, with accommodation for some 30 cases. It was expected to treat in this hospital orthopaedic cases and also cases of surgical tuberculosis. The Provincial Government undertook to increase the per capita grant for this class of cases. A great deal of excellent work has been done in this hospital.

The University Hospital has undertaken to provide for a certain number of cases of a similar nature in the district tributary to Edmonton, and although only in operation for a short period, a considerable number of these cases have been admitted.

WHOOPING COUGH.

Three hundred and fourteen cases were reported, with 44 deaths.

The majority of deaths in whooping cough occur under one year of age.

Infectious diseases are largely preventible, and the loss to the Province of 44 children from whooping cough is deplorable. It is generally considered that whooping-cough is a very mild disease, but the number of deaths during the year goes to show the necessity of taking urgent measures to control the spread of this disease.

The same remarks apply to measles. During the year 56 deaths occurred from measles and its complications. It is too often considered that measles is one of the necessary diseases which a child must have. You will note that there were five more deaths from measles during the year than from scarlet fever. It is not only that death may occur from measles, in many cases a child after a severe attack of measles is prone to pulmonary tuberculosis and other forms of pulmonary disease.

INCURABLES AND AGED DESTITUTES.

Accommodation is provided for this class of people at the Macleod General Hospital, Daysland General Hospital and also the Lacombe Home at Midnapore. During the year 61 cases were maintained by the Province at a cost of \$17,198.54.

These Homes are filled to capacity, and the question of further accommodation, thereby relieving the general hospitals and private persons of the care of this class of cases, must now be considered.

HOSPITALS.

The number of hospitals receiving the grant during the year was 61; the total amount paid was \$256,455.50. The number of hospital days was 512,911.

Special assistance was given to some hospitals.

FOREMOST HOSPITAL: Arrangements were made with the Red Cross Society to operate this Hospital, on the understanding that the Department of Health would assume all deficits. This Hospital serves a large territory where conditions owing to drought were bad, and it was considered advisable to assist in maintaining a hospital at this point.

TABER HOSPITAL: This was investigated by the Supervisor of Organization, and for part of the year the deficit was guaranteed. Later on, however, it was considered advisable to close the Hospital.

EMPRESS HOSPITAL: The circumstances of this Hospital were investigated, and it was decided to loan the Board a sufficient sum to enable it to continue the operation of the Hospital.

PEACE RIVER: An investigation there showed the necessity of some aid, which was granted.

BRICKBURN HOME, CALGARY, & NEXT-OF-KIN HOME, EDMONTON: In these Homes the children of soldiers who had lost their lives overseas, or those whose parents for other reasons were unable to maintain proper homes, were housed.

Grants were made by the Government towards the maintenance of these Homes.

At the request of the Premier an investigation was made into the comparative cost of the two Homes, and in consequence of that investigation it was decided to close the Brickburn Home and move the children to the Next-of-Kin Home, Edmonton. Shortly after Christmas, 15 children were transferred.

All of which is respectfully submitted.

W. C. LAIDLAW,
Chairman.

HON. R. G. REID
Minister of Health

1922	Scarlet Fever	Diphtheria	Typhoid Fever	Smallpox	Tuberculosis	Measles	Whooping Cough	Chicken-pox
CITIES								
Calgary	231	132	27	7	26	67	164	356
Edmonton	335	195	4	—	16	2,143	121	506
Lethbridge	14	89	18	1	10	261	—	19
Medicine Hat	11	34	2	2	3	1	2	12
Red Deer	1	—	—	—	—	—	—	—
Wetaskiwin	2	2	—	—	—	—	—	2
TOWNS								
Athabasca	1	1	—	—	2	52	—	—
Big Valley	—	8	—	—	1	—	—	—
Blairmore	30	—	—	—	1	—	—	—
Brooks	—	1	—	—	—	—	—	—
Carmangay	—	—	—	—	2	—	—	—
Claresholm	2	—	6	—	—	6	—	—
Coronation	1	—	—	—	—	—	—	—
Diamond City	—	8	—	—	—	—	—	—
Drumheller	—	1	2	—	2	—	—	—
Edson	—	4	—	—	—	—	—	—
Fort Saskatchewan	2	—	—	—	1	—	—	—
Grande Prairie	8	—	1	—	1	—	—	—
Granum	—	4	—	—	—	—	—	—
Hanna	1	—	5	—	—	2	—	2
Hardisty	—	1	—	—	—	1	—	—
Macleod	4	—	1	—	3	—	—	—
Nanton	—	—	1	—	—	—	—	—
Okotoks	—	—	1	—	—	1	—	2
Olds	—	—	1	—	1	—	7	—
Peace River	—	1	—	—	1	—	—	—
Pincher Creek	1	—	—	—	—	—	—	—
Ponoka	—	4	—	—	4	—	—	—
Raymond	8	—	—	—	—	—	—	—
Redcliff	—	1	—	—	—	—	—	—
Spirit River	—	—	—	—	—	—	—	—
Stony Plain	3	8	—	—	—	9	—	—
Strathmore	—	—	—	—	—	—	—	23
Taber	—	—	11	—	—	—	—	—
Tofield	1	—	—	—	1	—	—	—
Vegreville	6	12	—	—	—	18	—	8
Vermilion	—	15	—	—	1	—	—	—
Vulcan	—	—	1	—	—	—	—	—
Wainwright	8	—	—	—	—	—	—	—
Youngstown	—	7	7	—	—	—	—	—
VILLAGES								
Bashaw	3	—	—	—	—	—	—	—
Blackie	3	—	—	—	—	—	—	1
Bowden	1	—	—	—	—	—	—	—
Bruderheim	—	—	—	—	—	1	—	—
Chauvin	3	—	—	—	—	—	—	—
Chipman	—	1	—	—	—	35	—	—
Clive	28	—	—	—	1	—	—	—
Clyde	2	—	—	—	—	—	—	—
Duchess	—	2	—	—	—	—	—	—
Commerce	—	—	1	—	—	—	—	—
Empress	—	1	2	—	—	—	—	—
Entwistle	1	3	—	—	—	—	—	—
Erskine	—	—	—	—	—	1	—	—
Frank	—	2	—	—	—	—	—	—
Halkirk	4	—	—	—	—	—	—	—
Forward	715	537	91	10	77	2598	294	931

1922	Scarlet Fever	Diphtheria	Typhoid Fever	Smallpox	Tuberculosis	Measles	Whooping Cough	Chicken-pox
Carried forward	715	537	91	10	77	2598	294	931
Holden	1	.....	.....	.....	.....	.....	.....	.....
Hughenden	1	.....	.....	.....	.....	.....	.....	.....
Irma	4	1	.....	.....	.....	.....	.....	.....
Jenner	2	.....	.....	.....	.....	.....	.....	.....
Kitscoty .....	.....	.....	.....	.....	.....	48	.....	.....
Lomond .....	.....	2	.....	.....	.....	.....	.....	.....
Mannville .....	.....	1	.....	.....	.....	.....	.....	.....
Millet	1	.....	.....	.....	.....	.....	.....	.....
Mirror	1	1	.....	2	.....	.....	.....	.....
Mundare .....	.....	2	.....	.....	1	.....	.....	.....
Oyen .....	.....	.....	.....	.....	1	.....	.....	.....
Ryley	7	3	.....	.....	.....	.....	.....	.....
St. Paul des Metis	1	.....	17	.....	.....	38	.....	.....
Strome	6	.....	.....	.....	.....	.....	.....	.....
Spirit River .....	.....	.....	.....	7	1	.....	.....	.....
Sylvan Lake	1	.....	.....	.....	.....	.....	3	.....
Trochu	9	.....	.....	.....	.....	.....	.....	.....
Viking	2	.....	16	.....	.....	.....	.....	.....
Westlock .....	.....	1	.....	.....	1	.....	.....	.....
MUNICIPAL DISTRICTS								
No.								
Burlington	34	.....	.....	.....	1	.....	.....	.....
Warner	36	1	.....	.....	.....	2	.....	1
Kerr	39	.....	1	.....	.....	.....	.....	.....
Eureka	65	.....	2	.....	1	.....	.....	.....
Bow Island	94	1	.....	.....	.....	.....	.....	.....
Harmony	128	.....	2	.....	.....	.....	.....	.....
Clear Lake	129	.....	1	.....	.....	.....	.....	.....
Britannia	183	17	.....	.....	.....	.....	.....	.....
Dinton	189	5	1	.....	2	.....	.....	.....
Bow Valley	219	2	.....	.....	.....	.....	17	.....
Acadia	241	.....	1	.....	1	.....	.....	.....
Flowerdale	244	7	1	.....	.....	.....	.....	.....
Lone Butte	245	.....	.....	.....	1	.....	.....	.....
Sounding Creek	273	.....	1	2	.....	.....	.....	.....
Carbon	278	.....	8	15	2	.....	.....	.....
Canmer	301	1	.....	.....	.....	.....	.....	4
Wiste	303	.....	.....	.....	4	19	.....	.....
Dowling Lake	305	.....	.....	.....	1	.....	.....	.....
Lambton	306	.....	.....	.....	1	.....	.....	.....
Westerdale	311	.....	1	.....	.....	.....	.....	.....
Ghost Pine	312	.....	.....	.....	2	.....	.....	.....
Coronation	334	21	.....	.....	.....	.....	.....	.....
Success	336	1	.....	.....	.....	.....	.....	.....
Vimy	337	.....	9	.....	.....	.....	.....	.....
Hays	338	2	.....	.....	.....	.....	.....	.....
Hillcrest	362	4	.....	.....	.....	.....	.....	.....
Waverley	367	4	.....	1	.....	.....	.....	.....
Stocks	363	14	.....	.....	.....	.....	.....	.....
Bertawan	371	.....	.....	.....	1	.....	.....	.....
Sifton	391	.....	.....	.....	3	.....	.....	.....
Vale	392	2	.....	.....	.....	1	.....	2
Huamha	393	.....	1	.....	.....	.....	.....	.....
Wheatland	395	2	.....	.....	.....	.....	.....	.....
Haig	396	3	.....	.....	.....	.....	.....	.....
Lamerton	398	4	.....	.....	.....	.....	.....	.....
Crown	399	2	4	2	.....	.....	.....	.....
Lochearn	401	.....	.....	.....	1	.....	.....	19
Forward	844	563	144	37	102	2706	314	957

1922	Scarlet Fever	Diphtheria	Typhoid Fever	Smallpox	Tuberculosis	Measles	Whooping Cough	Chicken-pox
Carried forward.....	844	563	144	37	102	2706	314	957
Ribstone	421	5	5	.....	.....	.....	.....	.....
Gilt Edge	422	8	.....	.....	.....	.....	.....	.....
Battle River.....	423	7	2	.....	.....	.....	.....	1
Last West	431	.....	.....	.....	1	.....	.....	.....
Kinsella	424	1	.....	.....	.....	1	.....	.....
Melrose	426	.....	.....	.....	2	6	.....	.....
Grizzly Bear	452	.....	.....	.....	.....	.....	.....	15
Lakeview	454	2	1	19	.....	2	.....	9
Parkland	456	7	2	.....	1	2	.....	2
Bigstone	459	.....	1	.....	.....	.....	.....	.....
Melberta	483	5	2	.....	.....	22	.....	2
Birch Lake	484	.....	4	.....	.....	.....	.....	.....
Patricia	485	1	1	.....	.....	2	.....	.....
Beaver Lake	486	8	6	.....	.....	.....	.....	1
Corn Hill	487	2	.....	.....	.....	.....	.....	.....
Black Mud	488	2	3	.....	1	2	.....	.....
Liberty	489	11	5	.....	.....	1	.....	.....
Streamstown	511	2	2	.....	.....	6	.....	.....
Ethelwyn	512	.....	1	.....	.....	.....	.....	.....
Ukrainia	513	8	21	.....	.....	.....	.....	.....
Sobor	514	.....	8	.....	.....	.....	.....	.....
Norma	515	.....	1	.....	.....	.....	.....	.....
The Pines	516	.....	52	.....	.....	3	.....	14
Clover Bar	517	1	5	1	.....	.....	.....	.....
Strathcona	518	1	2	.....	.....	1	.....	.....
Spruce Grove	519	9	6	.....	.....	2	.....	.....
Inga	520	15	2	.....	.....	3	.....	.....
Lincoln	542	.....	7	1	1	.....	.....	.....
Laurier	543	1	10	.....	.....	.....	.....	.....
Eagle	545	.....	2	.....	.....	.....	.....	.....
Leslie	547	.....	.....	.....	1	.....	.....	.....
Sturgeon	548	1	9	.....	1	.....	.....	.....
Woodford	550	.....	.....	.....	1	22	.....	.....
Morthen	551	.....	.....	.....	2	.....	.....	.....
Pembina	552	4	1	.....	.....	.....	.....	.....
Boucher	572	.....	.....	.....	1	.....	.....	.....
St. Lina	574	.....	.....	.....	1	.....	.....	.....
St. Vincent	573	.....	.....	.....	.....	.....	.....	1
Wasel	575	.....	.....	.....	1	.....	.....	.....
Smoky Lake	576	.....	12	1	5	.....	.....	.....
Unity	577	.....	.....	.....	2	.....	.....	.....
Opal	578	.....	.....	.....	1	1	.....	.....
Hazelwood	579	.....	5	.....	.....	.....	.....	.....
Lockerbie	580	1	.....	.....	1	.....	.....	.....
Kitchener	582	2	.....	.....	.....	1	.....	1
Ashmont	605	1	.....	.....	.....	.....	.....	.....
Pibroch	609	2	.....	.....	.....	6	.....	.....
Grosmont	668	4	.....	.....	1	.....	.....	.....
Bear Lake	740	.....	.....	.....	1	.....	.....	.....
IMPROVEMENT DISTRICTS (Unorganized) No.								
Improvement Dist. 9	1	.....	.....	.....	.....	.....	.....	.....
Improvement Dist. 66	.....	1	.....	.....	.....	.....	.....	.....
Improvement Dist. 71	.....	1	.....	3	.....	.....	.....	.....
Improvement Dist. 100	4	.....	.....	.....	.....	.....	.....	.....
Improvement Dist. 122	.....	.....	.....	.....	1	.....	.....	.....
Improvement Dist. 126	.....	.....	.....	.....	1	.....	.....	.....
Forward	960	725	165	64	123	2789	314	1003

1922	Scarlet Fever	Diphtheria	Typhoid Fever	Smallpox	Tuberculosis	Measles	Whooping Cough	Chicken-pox
Carried forward	960	725	165	64	123	2789	314	1003
Improvement Dist. ....156	1	4	.....	.....	.....	.....	.....	.....
Improvement Dist. ....181	.....	.....	.....	1	.....	.....	.....	.....
Improvement Dist. ....185	.....	.....	1	.....	1	.....	.....	.....
Improvement Dist. ....216	4	.....	.....	.....	.....	.....	.....	.....
Improvement Dist. ....217	.....	.....	1	.....	.....	.....	.....	.....
Improvement Dist. ....331	13	.....	.....	.....	.....	.....	.....	.....
Improvement Dist. ....541	.....	1	.....	.....	.....	.....	.....	.....
Improvement Dist. ....583	1	.....	.....	.....	.....	.....	.....	.....
Improvement Dist. ....610	8	.....	.....	.....	.....	2	.....	.....
Improvement Dist. ....697	6	.....	.....	.....	.....	.....	.....	.....
Improvement Dist. ....252	.....	.....	.....	2	.....	.....	.....	.....
Bankhead .....	.....	.....	.....	1	.....	.....	.....	.....
Brule	1	.....	.....	.....	.....	20	.....	.....
Frog Lake Reserve	4	.....	.....	.....	.....	.....	.....	.....
Mercoal .....	.....	.....	2	.....	.....	.....	.....	.....
Saddle Lake Reserve	4	.....	.....	.....	.....	.....	.....	.....
Total	1,002	730	169	68	124	2,811	314	1,003

1922	Mumps	Cerebro-Spinal Meningitis	Erysipelas	Infantile Paralysis	Lethargic Encephalitis
CITIES					
Calgary	250	.....	19	.....	1
Edmonton	17	5	8	8	.....
Lethbridge	5	.....	.....	.....	.....
Medicine Hat	1	.....	.....	.....	.....
TOWNS					
Hardisty .....	.....	.....	3	.....	.....
Olds	7	.....	.....	.....	.....
Ponoka .....	.....	.....	2	.....	.....
VILLAGES					
Chipman	1	.....	.....	.....	.....
St. Paul des Metis .....	.....	.....	.....	2	.....
MUNICIPAL DISTRICTS					
Hays	338	1	.....	.....	.....
Hillcrest	362	.....	.....	4	.....
Sifton	391	.....	.....	1	.....
Lamerton	398	1	.....	.....	.....
Melrose	426	1	.....	.....	.....
Black Mud	488	1	.....	.....	.....
Clover Bar	517	2	.....	.....	.....
Total	286	6	32	15	1

REPORT OF THE PROVINCIAL SANITARY ENGINEER

SIR,—

I beg to submit herewith the Sixteenth Annual Report of the Branch of the Provincial Sanitary Engineer.

There have been submitted to the Provincial Board of Health during the year 1922 four sets of plans and specifications for waterworks and sewerage works for which certificates have been issued, a few necessary sets of plans and specifications preliminary to these, and a few sets of plans and specifications for miscellaneous works for which approval of the Provincial Sanitary Engineer alone is required.

The following is a detailed list of works for which Provincial Board of Health Certificates have been issued, together with the estimated cost of each.

WATERWORKS

Drumheller—

Certificate No. 160-1922—Waterworks extensions.

Estimated Cost.....\$ 23,421.00

SEWERAGE WORKS.

Edmonton—

Certificate No. 161-1922—Sewer extensions.

Estimated Cost..... 24,214.07

Edmonton—

Certificate No. 162-1922—Sewer extensions.

Estimated cost 45,000.00

Edmonton—

Certificate No. 163-1922—Separate Sanitary System.

Estimated cost \$12,500.00

Plans, specifications, and proposals in connection with sanitary engineering works submitted to the Public Utilities Commission were examined and advice given.

The system of sewage disposal at the Ponoka Provincial Mental Hospital was remodelled. An activated sludge system was installed.

At the new institution for mental defectives at Oliver an activated sludge system of sewage disposal was installed.

Plans and specifications of proposed hospitals submitted in compliance with the requirements of the Hospitals Ordinance were examined.

A thorough revision of the Provincial Board of Health Regulations was made and many new regulations added. The proposed regulations are now almost ready for submission to the Lieutenant Governor.

Several of the public institutions coming under the administration of the Public Works Department were visited and the sanitary engineering works in connection with these institutions inspected.

During the year there were examined bacteriologically 405 samples of water: of these 312 were found to have negative and 93 positive results. There were also examined, chemically, 251 samples of water; of these 180 were found to have negative and 71 positive results. Six hundred and thirty-eight samples of cows' milk were examined: of these 586 were examined bacterially, 9 chemically, 42 chemically and bacterially, and one for suspected adulteration; further to these, 14 samples arrived in unsuitable condition for examination, making a grand total of 652 milk samples submitted.

Three hundred and forty-one pounds of meat and 72 pounds of fish were seized as unfit for human food, all of which was destroyed.

Six dairymen were prohibited from disposing of milk under Regulation 82a of the Public Health Act; three of these having complied with the requirements of the Local Boards of Health have again been granted permission to sell milk as provided under the aforementioned regulation.

We commenced the year 1922 with five Sanitary Inspectors in our employ and have continued throughout the year with this number. During the fair season, one of the Inspectors was relieved of sanitary inspection work to take over, prepare and erect the Health Exhibit.

Our Sanitary Inspectors made inspection of 286 Health Districts; 153 of these districts were given a second inspection, while 19 of this number were subjected to a third inspection. Ninety-two visits were made to investigate complaints, or for other purposes such as a special request for inspection, locating suitable sites for nuisance grounds, hospital sites, cemetery sites, creamery sites, etc. In each case where complaint was made and on investigation was found to be justified, the necessary steps were taken and the matter properly adjusted. Six inspections were made of summer resorts. Fifty inspections of hospitals were made for the purpose of inspecting plumbing fixtures, ventilation, and sewage disposal.

In pursuance of the aforementioned inspection work our Inspectors personally issued 388 notices to abate nuisances and instructed the issuing of a considerably larger number by the executive officer of the respective Local Boards.

Sixty-three prosecutions for infractions of the Public Health Act were carried out by our Inspectors, and 100% convictions obtained. When an Inspector leaves to investigate an individual complaint, he is instructed to make an inspection of as much of that locality as he can do before he returns to headquarters with his report and for reimbursement of his expenses. This accounts for the order in which these inspections are made.

When an Inspector visits a health district his instructions are, previous to commencing his inspection, to call upon the Secretary of the Local Board and invite him or some member of the Local Board to accompany him on the tour of inspection.

Our Inspectors include in their inspection and report the sanitary condition of the following:

Waterworks, ice supplies, sewage disposal works, nuisance grounds, systems of scavenging, livery stables, abattoirs, slaughter houses, meat stores, dairies, creameries, hotels, lodging houses, restaurants, cafes, railway stations, hospitals, ice cream and soft drink parlors, bakeries, schools, places of noxious and offensive trades, cow barns, dairy farms, the inside and outside of every business house, and the outside surroundings of every private house.

Co-operating with the other Branches of the Department, the services of the Sanitary Inspectors have been used in connection with the inspection of hospitals, investigation of the circumstances of persons receiving charity and relief from the Department and the investigation of the causes of outbreaks of epidemics of infectious disease.

In July of this year, Inspector G. E. Cottle visited the Saskatoon Exhibition for the purpose of studying and reporting upon the nature of the Health Exhibit shown by the Bureau of Public Health, Provincial Government of Saskatchewan. He was able to gather information which will be found useful in developing the Health Exhibit shown by our Department. The spirit of co-operation exhibited by Mr. R. H. Murray, Director of Sanitation for Saskatchewan, during Inspector Cottle's visit, was highly appreciated.

The Public Health Exhibit was placed in charge of one of the Sanitary Inspectors and exhibited in Calgary, Edmonton, Sedgewick, and Clyde.

A Baby Clinic was held in connection with the Exhibit in Edmonton and Calgary.

The Health Exhibit consisted of a series of posters describing Baby Welfare, Child Welfare, School Inspection and Social Hygiene; mechanical devices describing tuberculosis and dairy farms; small posters describing tuberculosis, its causes and effects; and complete equipment for the nursing of children, which is explained by our nurses in attendance.

* In connection with the latter feature, should any exhibition authority desire to have a Baby Clinic held, that authority could arrange with the local doctors to hold a clinic and the services of our nurses would be available in connection therewith.

The staff accompanying the exhibit consisted of two nurses and one Sanitary Inspector, from whom information could be had by visitors to the exhibition.

Respectfully submitted,

R. B. OWENS, B.A., B.E.,
Provincial Sanitary Engineer.

REPORT OF THE DIRECTOR OF THE PROVINCIAL LABORATORY

SIR,—

I have the honour to submit the following report of the work done in the Provincial Laboratory during the year 1922.

STAFF.

No change.

LABORATORY EXAMINATIONS.

TABLE No. 1 gives in some detail the examinations made during the year under consideration in comparison with the work done during the preceding year. It will be observed that there has been an increase of over 21 per cent. in examinations performed. The most noticeable increases are the bacteriological examination of water, bacteriological examination of milk, miscellaneous examinations, the Wassermann reaction for the diagnosis of Syphilis where the figure has increased by nearly 1,000 examinations, and the pathological material where there has been an increase of nearly 500 examinations.

TABLE No. 1.

	Total No. of Specimens 1921	Total No. of Specimens 1922	In- crease	De- crease
Communicable Diseases—Sputum	374	451	77	.....
Diphtheria	1,666	1,229	.....	437
Typhoid Fever	121	217	96	.....
Waters—Bacteriological	335	412	77	.....
Chemical	234	251	17	.....
Milks—Bacteriological	489	586	133	.....
Bacteriologically & Chemically .....	.....	42		.....
Chemical	16	10		.....
Mothers' Milk	78	61	.....	17
Miscellaneous Examinations	607	837	230	.....
Smears for the Presence of Gonorrhoea	810	1,346	536	.....
Bloods for the Wassermann Reaction	4,084	5,008	924	.....
Pathological Material	1,011	1,501	490	.....
 Totals	 9,825	 11,951	 2,580	 454
 Increase: 2,126 specimens.				

TABLE No. 2 shows the number of containers prepared and distributed, and the quantity of Typhoid and other vaccine prepared and sent out.

TABLE No. 2.

	Outfits	Vaccines	Increase
Water Containers—Bacteriological	410	-----	-----
Chemical	239	-----	35
Special Containers.....	2,602	-----	47
Blood Containers.....	4,352	-----	1,159
Typhoid Vaccine	-----	4,875 c.c.	625 c.c.
Other Vaccines.....	-----	2,800 c.c.	1,950 c.c.
Total	7,603	7,675 c.c.	-----
Increase	1,241		2,575 c.c.

TABLE No. 3 indicates the part played by the Laboratory in the control of infectious diseases.

TABLE No. 3.

SPECIMENS EXAMINED FOR THE DIAGNOSIS OF COMMUNICABLE DISEASES.

DISEASE	No. of Specimens		No. of Physicians	No. of P.O.'s	Specimens received each Month				
	Positives	Negatives			Month	Sput.	Diph.	Typh.	Total
Pulmonary Tuberculosis	68	383	-----	-----	Jan	39	175	10	224
					Feb.	35	108	4	147
					Mar.	44	177	11	232
			225	109	Apr.	52	74	5	131
					May	48	66	15	129
Diphtheria	209	1,020			June	54	63	10	127
					July	39	55	21	115
					Aug.	25	54	37	116
Typhoid Fever.....	16	201	-----	-----	Sept.	32	78	46	156
					Oct.	25	72	24	121
					Nov.	29	177	20	226
					Dec.	29	130	14	173
Total	293	1,604	225	109		451	1,229	217	1,897

TABLE No. 4 shows that during the past year there was a 22 per cent. increase in the number of blood examinations. Dr. Shaw has continued to do this work as during the previous year.

TABLE No. 4.

WASSERMANN REACTION FOR THE DIAGNOSIS OF SYPHILIS.

Bloods Received	Bloods Examined	Bloods Positive to Reaction	Bloods Negative to Reaction	Bloods Unsuitable for exam.
5,098	5,008	1,115	3,893	90

PATHOLOGICAL HISTOLOGICAL DIAGNOSIS.

The increase in this work has been 48 per cent. Last year 1,011 specimens were examined, while during the present year 1,501 specimens have been examined. As during the preceding year, Dr. J. J. Ower has been responsible for this work.

WATER WORK

The number of samples of water examined bacteriologically was 412, the number examined chemically 251, an increase of 94 examinations over the figures of last year. Both bacteriological and chemical examinations of water are highly technical and the interpretation of the results is something which requires considerable experience. The chemical part of the work has been carried out by Mr. J. A. Kelso.

TABLE No. 5 gives the details of these examinations:

TABLE No. 5.

Number of samples of water examined bacteriologically		405
Number of samples of ice examined bacteriologically		7
Number of samples of water examined chemically		251
Number of samples of water examined bacteriologically and found unfit for human consumption.....	93	
Number of samples of water examined bacteriologically and found fit for human consumption	312	
Number of samples of ice examined bacteriologically and found fit for human consumption	7	
Number of samples of water examined chemically and found unfit for human consumption	71	
Number of samples of water examined chemically and found fit for human consumption	180	
Total	663	663

EXAMINATION OF COWS' MILK.

The increase in the bacteriological examination of cow's milk was 28 per cent., represented by an increase of 139 examinations. The chemical examination of milk was performed on 51 occasions as compared with 16 during the previous year.

TABLE No. 6 gives the details of these examinations:

TABLE No. 6.

Number of milk samples received		652
Number of milk samples examined	638	
Number of milk samples unsuitable for examination	14	
Number of milk samples examined bacteriologically for City Health Department	555	
Number of milk samples examined bacteriologically—Province	31	
Number of milk samples examined bacteriologically and chemically—Province	42	
Number of milk samples examined chemically only—Province	9	
Number of milk samples examined for adulteration—found adulterated	1	
Number of milk samples unsuitable for examination	14	
Total	652	652

MISCELLANEOUS EXAMINATIONS.

Under the heading of miscellaneous examinations a considerable number of very technical analyses have been made, such as the examination of blood stains to establish whether they were human or not, the examination of foods for bacteriological and other contamination, the examination of various body fluids, etc., and the examination of the tissues of animals for evidence of disease, etc., etc. The number of examinations was 837 as compared with 607 during the previous year, an increase of 38 per cent.

THE EXAMINATION OF SMEARS FOR GONORRHOEA.

Here is shown an increase of 536 examinations for the present year. The total number of examinations performed was 1,346, an increase of 66 per cent.

The whole respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

ALLAN C. RANKIN,
Director.

(See Appendix.)

APPENDIX.

ESTIMATED COMMERCIAL VALUE OF WORK IF MINIMUM CHARGE
WERE MADE.

Material	No. of Specimens	Price per Sample	Total
Sputum	451	\$ 2.00	\$ 902.00
Diphtheria	1,229	2.00	2,458.00
Typhoid Fever	217	2.00	434.00
Waters	663	15.00	9,945.00
Milks	638	5.00	3,190.00
Mothers' Milk	61	2.00	122.00
Miscellaneous	837	5.00	4,085.00
Gonorrhoea	1,346	2.00	2,692.00
Wassermann Test	5,008	5.00	25,040.00
Pathological Material	1,501	5.00	7,505.00
Total	11,951	.....	\$ 56,473.00
Increase: \$10,805.00.			

ANNUAL REPORT OF THE PUBLIC HEALTH NURSING BRANCH

SIR,—

I have the honour to submit herewith the Report of the Public Health Nursing Branch of the Department of Public Health for the year 1922.

In reviewing the work accomplished by the Nursing Branch of this Department for the past year, it gives great satisfaction to note the upward and outward growth of health service. The demand for better health conditions throughout the Province has been most encouraging, and the people have met the efforts of the Public Health Nursing Branch more than half way in its endeavor to carry nursing service to the people.

At the commencement of the year the University of Alberta with the Public Health Department gave a three months' course in Public Health Nursing. From this class, six nurses received appointments with the Department, bringing the number of nurses up to a staff of thirty.

The organization of schools into Public Health districts was based on a policy formulated at the beginning of the year. To present this scheme clearly to the several School Boards, a circular letter briefly explaining the policy was sent to the different secretaries of the Boards, followed by a visit from an organizer where necessary. This policy met with hearty approbation and has borne satisfactory results wherever it has been put into operation.

Five additional rural Public Health districts have been organized and operated this year. It was made a special feature to open new districts in portions of the Province that hitherto have had no Public Health service, viz.:—

ST. PAUL DES METIS:—Serving a mixed population and covering an extensive area.

PROVOST DISTRICT:—Working from Metiskow to the eastern boundary.

RED DEER DISTRICT:—Including the City and adjacent country.

WESTLOCK DISTRICT:—Branching out east, west, and north of the Town of Westlock.

CHIPMAN DISTRICT:—Is made up almost exclusively of Ukrainian settlers, and is operated north and south of the C. N. R.

INNISFREE DISTRICT:—Devoted entirely to Ukrainian work.

DRUMHELLER DISTRICT:—The work was introduced into this district during the previous year, and permanently established this summer. Owing to the fact that the bulk of the population at Drumheller consists of miners and their families, the work of a Public Health Nurse is particularly adapted to that district.

THE DISTRICTS OF HANNA, GRANDE PRAIRIE, FOREMOST, EMPRESS AND CARDSTON:—Are in their second and third years of operation.

Permanent Clinics for infants and children of pre-school age, and pre-natal advice are conducted in each of these districts. Special attention should be drawn to these rural Child Welfare Clinics. To establish one in a district is not always an easy proceeding; the material and accommodation the nurse has to work with is often of a scanty type. Long distances have to be covered and a certain reserve on the part of mothers to be overcome. Poise and initiative are required to make these Clinics a success.

Each school coming under the inspectorate of a Public Health Nurse receives yearly one full medical examination, with return visits for Health Talks, Class-room Inspections, etc., and follow-up work in connection with the pupils of the school.

STATISTICAL REPORT.

No. of Schools Inspected.....	352
No. of Health Inspections	11,056
No. of Classroom Inspections	1,825
No. of Treatments	267
No. Not Vaccinated	6,195
No. With Defects	5,610
No. Without Defects	4,272
No. With Malnutrition	1,509

SUSPECTED DEFECTIVE CONDITIONS.

Vision	903
Hearing.....	203
Adenoids.....	1,076
Tonsils	2,010
Teeth	2,971
Mental Defectives	40

SYMPTOMS DETECTED.

Thyroid Glands	244
Eye Conditions.....	143
Tuberculosis.....	17
Nervous Symptoms.....	88
Impetigo	115
Scabies	56
Pediculosis	572
Ringworm	49
Other Skin Conditions.....	94
Communicable or Infectious Diseases.....	171

WORK DONE.

Child Welfare Clinics.....	107
Attendance at Clinics.....	1,080
Schoolroom Talks.....	381
Home Visits	2,336
Demonstrations	92
Interviews	445
Public Lectures	31
Inoculations	1,003
Swabs	51

RESULTS OBTAINED.

Glasses Fitted	54
Glasses Refitted	9
Tonsils Removed.....	133
Adenoids Removed.....	124
Dental Treatment.....	235
Surgical Treatment.....	22
Medical Treatment.....	37

CHILD WELFARE CLINICS.

During the year the Child Welfare Clinics in Edmonton and Medicine Hat have had a marked increase in their attendance, an evidence of the appreciation of the citizens of both places. The Department endeavors to maintain a degree of efficiency in this branch of our work which upholds the highest standards of improved methods.

During the autumn, the City of Calgary, supported by this Department, opened a Clinic for Infant, Child Welfare and Pre-natal advice. This Clinic is in charge of one of our Public Health Nurses, who has her headquarters in the City of Calgary and conducts three or more subsidiary Clinics in the outskirts of the City.

EDMONTON CHILD WELFARE CLINIC.

No. enrolled	3,568
No. of Babies in attendance	3,147
No. of Pre-School Children in attendance	521
No. of Clinics Held	102
Average Attendance	36
No. of Nurses' Visits to Homes	5,697
No. of Cases on Roll	1,548
No. of Babies on Roll	1,013
No. of Pre-School Children	535
No. of Babies Discharged	86
No. of Pre-School Children Discharged	36
No. of Deaths	27
No. of New Cases Admitted	889

DEFECTIVE CONDITIONS FOUND IN BABIES.

Malnutrition	76
Rickets	16
Diarrhoea	188
Eczema	53
Impetigo	68
Scabies	3
Ringworm	1
Furunculosis	3
Rash	7
Seborrhea	8
Bluid	1
Discharging Ears	48
Sore Throat	4
Tonsils	2
Adenoids	2
Thyroid	1
Thrush	25
Tongue-tied	8
Mute	1
Hernia	50
Hydrocele	6
Phemosis	113
Infected Umbilicus	4
Urethral Ulcers	1
Intertigo	68
Congenital Heart Condition	1
Congenital Malformation	5
Congenital Syphilis	1
Chronic Bronchitis	5
Croup	3
Pneumonia	4
Convulsions	2
Tetany	1
Otitis Media	2
Anaemia	4

DEFECTIVE CONDITIONS FOUND IN BABIES—*Continued.*

Stomatitis.....	3
Facial Paralysis.....	1
Paralysis	2
Prolapsed Rectum.....	1
Fractured Clavicle.....	1
Pyloric Stenosis.....	1
Osteomyelitis	1
Worms	3
Referred to Family Doctor.....	83

DEFECTIVE CONDITIONS FOUND IN PRE-SCHOOL CHILDREN
(2-6 YEARS).

Eye Conditions.....	10
Tonsils	88
Adenoids.....	79
Glands	40
Goitre	1
Discharging Ears.....	8
Defective Hearing.....	5
Carious Teeth.....	30
Abcessed Teeth.....	1
Malnutrition	15
Rickets	8
Eczema	9
Impetigo	3
Scabies	8
Ringworm	8
Paralysis	1
Stomatites	1
Anaemia	2
Phemosis	15
Inguinal Hernia.....	3
Tonsilitis	1
Bronchitis.....	3
Heart Conditions.....	2
Tuberculosis.....	7
Mental Defectives.....	3
Chorea	1
Referred to Family Doctor.....	27

Of the twenty-seven children who died, twenty-six were babies, twenty-two of these being under one year of age.

Death was due to the following causes:—

Diphtheria (Pre-school child).....	1
Pneumonia	10
Chronic Intestinal Indigestion.....	8
Meningitis	2
Intestinal Indigestion.....	5
Erysipelas.....	1

The results obtained through the past year through the work of the Child Welfare Clinic at 604 Civic Block, Edmonton, have been most gratifying.

The enrollment exceeded that of last year by 282, and the attendance by 1,176. Seventy-six children were in attendance at one Clinic, breaking all previous records.

Of the twenty-six Clinic babies who died, twenty-four were bottle-fed babies. Of the thirteen babies who died from Intestinal Indigestion, eight were feeble from birth, owing to pre-natal causes.

Of the ten who died from pneumonia, the disease in most cases followed attacks of measles, bronchitis or diarrhoea, which were not considered serious by the parents.

Eighty-five pre-natal cases were supervised by the Clinic nurses. Each case was instructed to pay an early visit to her physician, and we are pleased to report that this was done, and that in all cases, both mother and child came successfully through the confinement.

Much credit is due Dr. Folinsbee and Dr. Leitch for their untiring effort on behalf of the Clinic.

Owing to the splendid co-operation of the City Health Department, overlapping in the work is prevented, and the services of Miss Bailey, City Health Nurse, are available for the Clinics.

Thanks are due Miss Klyft, the Canadian Patriotic Fund, Miss King and the Welfare Board for the timely assistance given needy cases brought to their attention by the Clinic Nurses.

That the mothers fully realize the value of the follow-up work done in the home by the nurses is evident from the number of telephone calls received daily from all parts of the City, requesting special visits from the Nurses. The Nurses were able to make over two thousand more visits this year than last.

MEDICINE HAT CHILD-WELFARE CLINIC.

No. of Babies in Attendance.....	1,213
No. of Pre-School Children in Attendance.....	146
No. of Clinics Held.....	101
Total Attendance.....	1,360
Highest Attendance.....	40
Average Attendance.....	14
No. New Cases Admitted during Year.....	195
No. Out-of-Town Cases Admitted during Year.....	37
No. Bottle-fed Cases during Year.....	505
No. Breast-fed Cases during Year.....	279
No. Mixed Feeding Cases during Year.....	141
No. General Diet Cases during Year.....	434
No. Cases on Roll.....	615
No. Deaths during Year (Causes unknown).....	2
No. Home Visits.....	1,101
Demonstrations of Feedings.....	33

DEFECTIVE CONDITIONS FOUND IN BABIES.

Malnutrition.....	99
Eczema.....	13
Impetigo.....	4
Closed Tear Ducts.....	1
Sore Ear.....	1
Sore Throat.....	1
Sore Eyes.....	3
Whooping Cough.....	1
Diarrhoea.....	3
Enlarged Tonsils and Adenoids.....	2
Swollen Cervical Glands.....	3
Hernia.....	2
Phemosis.....	4
Bronchitis.....	1
Discharging Ear.....	5
Recto-Vaginal Fistula.....	1
Cases Referred to Family Doctor.....	7

DEFECTIVE CONDITIONS, PRE-SCHOOL CHILDREN (2-6 YEARS).

Defective Hearing.....	1
Teeth	3
Glandular Conditions (Swollen).....	12
Enlarged Tonsils.....	30
Enlarged Adenoids.....	27
Eczema	2
Nutritional Cases.....	63
Malnutrition	9
Phemosis	8
Impetigo	2
Discharging Ear.....	2
Rickets.....	1
Otitis Media.....	2
Suspected Mastoid.....	1
Swollen Cervical Gland and Abscess.....	1
Referred to Family Doctor.....	22

TRAVELLING CHILD WELFARE CLINIC.

The travelling Child Welfare Clinic is yearly becoming more and more popular. Through the co-operation of the Women's Institutes, the U. F. W. A. and the Soldiers' Settlement Board, a great many mothers with their babies and children of pre-school age received attention from our Travelling Clinic. Not infrequently mothers will return year by year with their families of little ones for advice, to carry away new literature and to pick up suggestions for the care of their family. The Travelling Clinic is becoming an established factor in the public health work of this Province, and great appreciation is due the local doctor who helps to keep up its efficiency. In all, 1,558 babies and children of pre-school age were examined by our Travelling Child Welfare Clinic.

LECTURE ITINERARIES.

Throughout the entire year three Public Health Nurses have been employed on extended Lecture Itineraries. These itineraries were arranged through the several organizations and societies which spread over the country, serving as an excellent means of transmission between the nurse and the public. Fourteen thousand two hundred and seventy-one people were addressed on subjects pertaining to Preventive Medicine, Infant Welfare, Home Nursing, First Aid and Social Hygiene. It is worth making note of the fact that requests for these lectures have come from the outside to us. It points out the fact that it is no longer necessary for this Department to bring public health to the notice of the people, who are realizing more and more their responsibility and the necessity of having better health conditions in their communities.

These lecturers are equipped with a Demonstrating Outfit on Home Nursing and First Aid, also a moving-picture machine showing Health Films.

Miss Martha Morkin, one of our lecturers, resigned from the staff in September to fill a position as Matron of the Mayo Hospital, in the Yukon, under the Dominion Government.

AGRICULTURAL COLLEGES.

As in previous years, a Course in Physiology, Home Nursing and First Aid has been given to the students of the Agricultural Colleges

by two Public Health Nurses, also short courses to the Normal School students in Prevention and Detection of Communicable Diseases, First Aid and Personal Hygiene.

DISTRICT NURSES.

This service is filling a long felt want in the Province for obstetrical nursing, first aid, and general care of the sick, in outlying portions of the Province where medical service is not yet available. A great deal of responsibility is imposed upon the nurse. She must be a woman of indomitable courage and resourcefulness, for her isolated life is fraught with many hazardous experiences which bring into play traits of character which those living in more settled surroundings are seldom called upon to exercise. In the past year, three new districts have been formed and two closed.

Miss Mary Conlin, having recovered from an accident sustained during the previous autumn, returned to her district at Griffin Creek last September.

The district of Bear Lake automatically closed, the services of a doctor being available to the community, and Miss Redmond, nurse in charge, resigning from the staff.

The district of Beaver Lodge also closed, the services of a doctor being available. Miss Wotherston, nurse in charge, being transferred to the new district of Halcourt, being a portion of the country lying south and west of Beaver Lodge.

The district of Yeoford is in its third year of operation, and is in charge of Miss S. E. Smith.

The district of Lac la Biche has had the services of a nurse for the greater part of the year, the nurse being supplied for a temporary duration only.

The district of Rife, north of St. Paul des Metis, opened in October, and is operated by Miss D. Keating.

SUMMARY OF WORK DONE BY FIVE DISTRICT NURSES, FROM JANUARY 1ST, 1922, TO DECEMBER 31ST, 1922.

Total No. of Calls made.....	1,650
Consultations.....	754
Treatments	1,078

CLASSIFICATION OF CASES

(a) Medical.....	852
(b) Surgical.....	251
(c) Obstetrical.....	103
Total Number of Deaths.....	14

It is the duty of every nurse, wherever she may be in the Province, to carry out a method of procedure known as "follow-up" work. It is classified under the following headings:

TUBERCULOSIS:—Before the patient is admitted to the Central Alberta Sanatorium and after discharge from the same.

SOCIAL SERVICE WORK:—Under Charity and Relief.

INDIGENTS REQUIRING MEDICAL TREATMENT:—Arrangements have been made by the Provincial Department of Public Health and the University Clinic to provide hospital accommodation for orthopaedic and other cases requiring long continued treatment and con-

valescence. Wherever possible the nurse makes a full investigation of each case and reports on it. One of our staff nurses is on duty at the University Clinic, Edmonton.

During the year a number of children requiring medical help and continued treatment have been referred by the Public Health Nurses to the Junior Red Cross Hospital at Calgary, and have there received the best of care and attention. Great credit is due to the Junior Red Cross Branch of this Province for so generously supplying this long-felt need.

In conclusion, I wish to recognize the enthusiasm and loyalty with which the staff have carried on their duties in the past year, and the co-operation of the public in assisting in the development of this important work.

ELIZABETH CLARK,
Superintendent, Public Health Nursing Branch.

Edmonton, Alberta, January 22, 1923.

ANNUAL REPORT OF THE HOSPITALS BRANCH

SIR,—

I have the honour to submit herewith a Report covering the work of the Hospitals Branch for the year 1922.

During the year, two Municipal Hospital schemes were submitted to the ratepayers, namely, Grande Prairie and Athabasca Municipal Hospital Districts. In each case the vote was favourable to the scheme and received more than the two-thirds majority required under the Act.

An application was made by certain residents of the Grande Prairie District, for a recount, and this was granted by the Minister, but the parties interested took the matter to the Courts, and through an injunction and these legal proceedings were dealt with in the Courts and the injunction removed. A settlement was subsequently arrived at and the application for the recount withdrawn, upon the Minister granting a plebiscite for the detaching of a certain portion of the included area, and this vote will take place early in the new year.

When this plebiscite has been disposed of, the Board will immediately undertake to place the provisions of the scheme in operation, and it is hoped, that by at least the 1st of April, arrangements will be made for the operation of a Municipal Hospital at Grande Prairie by continuing in the present building or making some other temporary arrangements until the new Hospital is built at this point.

The Grande Prairie scheme was the first to make provision for a vote to be taken for two or more sites, and the value of the provision in the Act, making such a vote possible, was fully justified in this case.

In the Athabasca Municipal Hospital District, the vote was overwhelmingly in favour of the scheme and the Board took over the Hospital at the Town of Athabasca, from the Victorian Order of Nurses, at the nominal rental of One Dollar per year for ten years. By this arrangement, the Board are not faced with any debenture indebtedness and consequently the hospital should operate at an extremely low cost per patient per day, when the only charges to be provided are maintenance and operation.

The Hospital serves a very large area and should prove a blessing to the people of the Hospital District.

The Department has not endeavored to unduly press Municipal Hospital organization on even those who appeared ardently interested in the formation of districts during the year.

The establishment of a Municipal Hospital District means increased taxation, and, while the imposition of this tax does not mean a very great burden, at the same time it was found that in a very considerable portion of the Province people could not reasonably carry additional burden of taxation, notwithstanding the fact that by the increased taxation imposed through the creation of a Municipal Hospital, a great reduction would be made in the cost of hospital service to sick persons.

The Département has been pleased to co-operate to the fullest possible extent in furnishing information and addressing meetings and maintaining a constant interest in the Municipal Hospital organization work, and with the statistical information forwarded by this Département upon request, the success of the Municipal Hospitals operating in this Province is made known through the details provided, and there is no doubt that if the major portion of the Province returns to normal conditions, there will be a large number of new Municipal Hospital Districts established, and the stimulating effect of the success of the other institutions of the Province, should prove to the ratepayers of the new districts, when formed, that they are not entering into anything experimental, but are merely adopting the most unique hospital system in existence in Canada.

It is extremely gratifying to note that notwithstanding the two or three years of recognized depression, the Municipal Hospitals, year by year, are increasing in popularity; rendering increased service, and financially, generally speaking, are in better condition at the end of the present year than could be recorded any year since placed in operation. I think that this is an outstanding exemplification of the merits of the Municipal Hospital system and certainly has preserved the slogan: "The Maximum Service at the Minimum of Cost."

When it is considered that the percentage of taxes paid, under the Municipal Hospitals Act, is no greater than the proportion paid for Municipal or School taxes, and which amount is admittedly below normal, as collected within the current year, and the Municipal Hospitals are able in the majority, to show credit balances in the bank, after paying all charges for maintenance, operation, and the repayment of a debenture principal and interest, the natural conclusion can only be that in the Municipal Hospitals system of this Province, there has been shown marked efficiency and loyalty on the part of the Board, the officials and the people, and coupled with an increased number of patients that have been treated at these institutions, with a corresponding reduction in cost, in the average, it would appear, that no great argument is required to prove the solidity of the movement.

I am of the opinion that the foundation of the success of the Municipal Hospitals is, primarily, their strong financial basis. It is absolutely impossible to function properly in any hospital, unless the institution can be carried along successfully financially, and assured at the outset, and the records and information made available to this Département clearly indicate that the foundation stone of success of every hospital operating in this Province rests, first and always, upon its financial basis.

During the year, four hospitals were placed in operation, namely, Provost, Viking, Hanna and Athabasca. The Provost and Viking buildings are of 10-bed capacity, and Hanna of 22-bed capacity. These institutions are new buildings, fully equipped, and they have performed splendid service since placed in operation.

With the opening of these Hospitals, and the institution at Athabasca, there are now thirteen Municipal Hospitals open for service in the Province.

The scope of the work of this Branch was enlarged to include supervision of all the hospitals of the Province, and there has been in consequence, made available to every hospital in the Province, the

services of the Department, when requested, in an effort to stabilize the organization of any institution and to assist in adjusting the finances in accordance with the service of the institution.

The survey made by this Department during the year, clearly indicates that hospital charges at institutions, generally, of the type other than Municipal Hospital, and, particularly, in the smaller institutions, are beyond that which people, generally, can afford to pay. The financial and statistical information received from these institutions shows that there is a general looseness in the keeping of the financial records, and information which should be readily available to the Department has not been furnished, not only within a reasonable time, but with any degree of accuracy.

Personal inspection of certain institutions revealed the fact that few, if any, books of record are kept, and in the smaller hospitals, there is no recognized form of accounting, and, consequently, even the authorities operating the institutions have no concrete knowledge of what the actual cost of the institution is so far as operation and maintenance are concerned, and it is found that arbitrary charges are set for service, and these rates, on the surface, appear to be out of proportion with the value of the service rendered.

A depreciation of the good intentions of the authorities of these particular hospitals is not warranted, but it is plainly evident that by co-operating with this Department in an effort to stabilize the financial conditions of the institutions, and to properly organize the staffs, I am firmly of the opinion that these institutions can, in the majority, continue to function at a decreased cost to patients treated at the same.

The Department has been actively engaged in acquiring the necessary details leading up to an extensive co-operation with these institutions in the new year, with a view of arriving at, by joint co-operation, a solution which should mean increased efficiency at reduced cost and a consequent reduction in the rate charged per diem to the patient.

I might be permitted to set out one example. A certain institution in a small village charged \$4.50 to \$5.00 per day. There is one doctor located at this point. The Hospital was operated with one graduate nurse. If the patient took the train, as the village is on the line of railway, and entered a large hospital in either Calgary or Edmonton, he or she could be treated in a Public Ward at half the cost, and the difference in the service is not open to comparison.

In the interest of sick persons, something should be done, by joint co-operation, to remedy this condition.

It is not presumed, that reductions can be made to compare with the cost at the large institutions in the cities, but there is a wide field open for concentrated effort, to bring about a new condition of things in the interest of sick persons who must provide the money to pay these apparently exorbitant hospital rates, and remove, in consequence, to a considerable extent, the penalty imposed upon persons when sick.

It is particularly gratifying to the Department to note the splendid spirit of the authorities of the smaller institutions, in an endeavor to co-operate with the Department, and during the new year, it is hoped

that there will be created the most pleasant relationships, and, jointly, there will emanate a happy issue out of the present unsatisfactory conditions.

This Department has been pleased, at the solicitations of the City Council of the City of Red Deer, and the concurrence of the Minister of Health, to join with the Hospital Commissioners operating the Red Deer Memorial Hospital during the past year.

This Department undertook to reorganize, for the Board and the Commissioners, the institution, and, as a result of the reorganization, the supervision by this Department in conjunction with the Board and Superintendent, an institution that was operating at a very great loss, has, in ten months, been placed on a solid financial basis resulting in the saving of several thousands of dollars, and it is recognized, that notwithstanding this saving, the efficiency of the Hospital has been greatly improved. This is one outstanding example of what can be done by co-operation, coupled with a determined effort to give sick persons the very best service possible, having regard, however, to the necessity of the assurance at the outset, that the financial resources required to meet this service will be made available.

It is important to note with regard to this institution, that, notwithstanding the criticism that has been offered with regard to the present legislation governing hospitals, and, particularly, the responsibility for patients' fees, as covered by Improvement District, Municipal District, Town, and Village Acts, that a strict compliance with these provisions has been carried out in the administration of this institution and has proved eminently successful. In this connection, the experience of this Department would indicate that legislation is two-sided, and, particularly, dealing with legislation relative to hospitals, it must be remembered that if Municipalities have stated and defined responsibilities, Hospital authorities have also their responsibilities, and a condemnation of the provisions of the Statutes in this regard, if not lived up to, is not necessarily a deterrent to the value of the legislation.

As a result of the successful management of this institution and its present splendid financial success, there is every evidence before the Department, that an effort will be made early in the new year to establish a Municipal Hospital District comprising the City of Red Deer alone.

During the year, three approved Hospitals were closed, namely, Edson, Taber and Strathmore. These institutions were forced to discontinue service, as a continuation of the same only meant the accumulation of deficits.

The Department wishes to record its deep appreciation of the co-operation of the Boards, and members of the staffs of the Municipal Hospitals of the Province, and not only have the relationships between the Department and these officials been extremely happy, but, there has been a fund of valuable information made available to the Department and the educational value cannot be over-estimated.

Respectfully submitted,

ARTHUR K. WHISTON,

Supervisor of Organization.

REPORT OF THE DIRECTOR OF THE DIVISION OF VENEREAL DISEASES

SIR,—

I beg to submit herewith the Third Annual Report of the Division of Venereal Diseases.

Great strides have been made in the last few years in the education of the people regarding venereal diseases. The diagnosis and treatment have become so highly scientific of late, that those diseased, if properly looked after, can be cured. Such increased progress has been made in the education of the people along these lines that instead of concealing their disease, they report for examination, as they feel they can be cured.

In this Province, the Division of Venereal Diseases is very well organized, and it feels that it is doing as well and as good work here as in any other province similarly situated.

The work of the Division is being carried on as follows:—

1.—TREATMENT OF THE INFECTED.

Every person suffering from a venereal disease is required by regulation to place himself under treatment by a regularly qualified medical practitioner. Clinics for the diagnosis and treatment of these diseases are now established in Edmonton, Calgary and Medicine Hat. These clinics are undoubtedly fulfilling a very useful purpose, many of our cases having neglected to receive treatment for years. It is particularly encouraging to note the readiness with which syphilitics are applying for treatment. The fact that syphilis is a painless and an insidious disease has, in the past, been responsible for a large number of untreated persons passing gradually into a fatal stage of the disease. This is now being counteracted by publicity and education. Also the fact that the mere cessation of the discharge in gonorrhoea does not constitute a cure, and that cure can only be proven when various blood and microscopic examinations are done. So that many persons who thought they were non-infectious have been proven infectious, and the idea has been driven home that a patient, who wishes to make sure he is cured, must have an examination by a qualified medical practitioner.

During the year this Division had 361 cases of syphilis and 444 cases of gonorrhoea under active treatment. Six hundred and thirty-eight examinations of persons in the Provincial Gaol were made, 152 of these were found to be infected with a venereal disease. Of this total, 71 were females. If the diseased prisoner at the expiration of his sentence is still in the infectious stage of syphilis or gonorrhoea, he is detained, and treatment is continued until he becomes non-infectious. On the other hand, if at the expiration of his sentence, he is non-infectious, but not yet cured of the disease, he is discharged from gaol and instructed to report at one of the clinics for further treatment. With the exception of a few, whom we have been unable to trace, these people have been quite regular in their attendance.

2.—EDUCATION OF THE INFECTED.

All persons coming under treatment are instructed, both verbally and by pamphlet, as to the precautions to be taken against the spread of the disease and the results to be expected if treatment is neglected. The medical practitioners in the Province have been furnished with instruction cards to distribute to all infected patients coming under their treatment.

3.—EDUCATION OF THE NON-INFECTED.

A variety of pamphlets suitable for general distribution have been prepared, and are being circulated widely. Moving pictures dealing with social hygiene have been procured, and are being circulated. The showing of the film is accompanied by a lecture, and has a high educational value.

Last November a general Health Week was held throughout the Province, and the venereal side of the question was widely and clearly explained. Moving pictures, coloured lantern slides and lectures by various general practitioners and specialists were given. The meetings were very largely attended, and we consider that a great deal of good was done. In the next month following, at least fifty cases came to the Edmonton Clinic of their own accord for examination, and quite a few we found to be really infectious and not cured, when they had considered themselves to be the opposite. We think that an annual Health Week is to be highly recommended.

4.—POLICE COURT CASES.

Sixty-six police court cases were examined for venereal diseases. These examinations were made largely at the instance of the lady magistrates, who have taken a keen interest in the venereal diseases prevention work.

The figures following indicate briefly the work carried out by the Division during the year:—

EDMONTON CLINIC, 330 Tegler Building:

No. of Patients	781
Sexes of Patients: Male	571
Female	210

CLASSIFICATION OF THEIR DISEASES:

	Syphilis	Gonorrhoea	Chancroid	No. Diagnosis of V.D.
Male	92	266	1	212
Female	50	30	—	91

Number and results of Wassermann tests:—
1033 tests, of which 291 were positive.

CALGARY CLINIC, 500 McLean Building:

No. of Patients	112
No. of Patients: Male	76
Female	36

CLASSIFICATION OF THEIR DISEASES:

	Syphilis	Gonorrhoea	Chancroid	No. Diagnosis of V.D.
Male	32	25	2	17
Female	20	4	—	12

Number and results of Wassermann tests:—
126 tests, of which 57 were positive.

FORT SASKATCHEWAN GAOL:

No. of Patients.....	152
Sexes of Patients: Male	81
Female	71

CLASSIFICATION OF THEIR DISEASES:

	Syphilis	Gonorrhoea	Chancroid	No. Diagnosis of V.D.
Male	27	15	Nil	39
Female	20	24	---	27

Number and results of Wassermann tests:—

541 tests, of which 66 were positive.

LETHBRIDGE GAOL:

No. of Patients.....	32
Sexes of Patients: Male	31
Female	1

CLASSIFICATION OF THEIR DISEASES:

	Syphilis	Gonorrhoea	Chancroid	No. Diagnosis of V.D.
Male	21	10	Nil	Nil
Female	1	---	---	---

Number and results of Wassermann tests:—

245 tests, of which 18 were positive.

MEDICINE HAT:

No. of Patients.....	32
Sexes of Patients: Male	27
Female	5

CLASSIFICATION OF THEIR DISEASES:—

	Syphilis	Gonorrhoea	Chancroid	No. Diagnosis of V.D.
Male	9	8	4	6
Female	4	---	---	1

Number and results of Wassermann tests:—

58 tests, of which 34 were positive.

REPORTED CASES BY DOCTORS IN THE PROVINCE:

	Male	Female	Total
Syphilis	30	6	36
Gonorrhoea	90	6	96
Chancroid	2	---	2
			134

RECAPITULATION

	Male	Female	Total
Syphilis	181	95	276
Gonorrhoea	324	58	382
Chancroid.....	7	---	7
Non-Venereal.....	274	131	405
Final total			1204

Respectfully submitted,

D. EMERSON SMITH,

Director,

Division of Venereal Diseases.

ANNUAL REPORT OF SUPERINTENDENT OF HOME FOR MENTALLY DEFICIENT CHILDREN

(81st AVE., SOUTH EDMONTON)

SIR,—

I hereby submit the following report for the year ending December 31st, 1922.

	Males	Females	Total
No. Enrolled December 31st, 1921.....	22	23	45
No. Actually Present December 31st, 1921.....	22	23	45
Admissions during Year 1922.....	7	5	12
Voluntary Admissions.....	7	5	12
Custodial Cases.....	—	—	—
Total No. Enrolled during Year.....	29	28	57
Discharged during Year.....	1	4	5
Deaths during Year.....	—	2	2
No. Enrolled December 31st, 1922.....	27	23	50
No. Actually Present December 31st, 1922.....	27	23	50
Wards of the Province	}	Total Enrollment	3
Wards of the Municipalities			41
Private Cases			13
Applications for Admission (awaiting opening of new School) to date, December 31st, 1922 (approx.).....			225

Total No. of days for 1922	17,447 days
Revenue for Maintenance	\$ 5,191.51
Revenue not Collected	3,332.22
Appropriation for 1922.....	19,860.00
Total Expenditure 1922	18,954.27
Balance	905.73
Cost per Patient per Day	1.08
Cost per Patient per Day, less revenue .....	.79
Salaries for 1922.....	8,800.06
Bonuses	906.45
Total	9,706.51
Drugs and Medical Supplies	188 69
Supplies—Food, Clothing, etc.	9,059.07

The above data are self-explanatory. A per capita cost of 79c. a day for maintenance is not unduly large considering the type of case and our limited number of cases. With larger quarters, the same staff could care for approximately double the number of cases, given an equal mixture of low and higher grades, thereby still further lowering the cost of maintenance.

GENERAL COMMENT.

HISTORY.—Although control of the problem of mental deficiency was transferred from the Department of Education to the Department of Public Health at the beginning of the year 1922, no change in the personnel of the staff was made for some months, Miss McConnell continuing to act in an efficient manner as Matron Superintendent.

Later, it was felt that in view of the nature of the work and the contemplated expansion, the executive should be strengthened, and with this in mind a medical superintendent was appointed in August. In September, the Matron resigned, and Miss Margaret McLean was appointed Acting Matron pending the selection of a permanent appointee.

In September, the Superintendent left for the East for an intensive course of study of institutional work in Massachusetts, returning in November; the work at the Home being supervised meantime by the Department.

Since the return of the Superintendent the staff has been further added to, so that with the close of the year 1922, we feel that it is not only capable and equal to the work in the S. Edmonton Home, but that it forms an efficient nucleus for the larger work about to be undertaken at Oliver.

OVERCROWDING.—In spite of the overcrowding and the lack of facilities to adequately meet the demand for the proper physical and mental training of the children, the Home has continued to fill a great need throughout the year and much credit is due to the Acting Matron, Miss McLean, the attendants, and others of the staff for the way in which they have latterly carried on the work of control and care. When it is considered that of a population of fifty children, twenty or more are idiots, the majority being of the low-grade, helpless type, and while of the remainder not more than a half dozen can dress themselves, one is more and more impressed with the sense of responsibility manifested and the devotion which has been shown by the attendants in their daily routine. The overcrowding and the lack of space and proper facilities have greatly interfered with the carrying out of a definite programme of special mental training for our children during the year. Physical training such as we were capable of giving has been stressed, however, and will continue to be emphasized until we take over the buildings at Oliver, and are in a position to properly grade and classify them according to mental capacity.

HEALTH.—The general health of the children has been remarkably good apart from those in whom epilepsy complicates their mental defect. Twenty-five per cent. of our population is epileptic, and the ages range from 7 to 18 years. This is a distressing feature of the work, especially under our present handicap of unsuitable quarters, and we are eagerly looking forward to the time when it will be possible to segregate this class from the harmless and otherwise physically fit members of the Home.

DEATHS.—There were two deaths during the year, one in May, presumably from status epilepticus, and one in early November from general inanition. The latter case was a microcephalic, practically helpless idiot of poor vitality, and often subject to gastric and alimentary disturbances.

DISEASES.—There were five cases of Scarlet Fever in the early part of the year, and one case of Diphtheria in August with no mortality.

Plenty of fresh air, personal hygiene, and general cleanliness is insisted upon; the children are out every day when at all possible (those capable of walking out), and this attention coupled with good nutritious food has helped in no small degree in keeping them comparatively healthy and happy.

ADMISSIONS.—Applications for admission have continued to pour in upon us, and we but await the opening of the new School at Oliver to properly deal with all the many cases that demand the care and special training which only a well established institution can really give.

FOREWORD.—We feel we are really just entering upon the work for the mental defectives in this province, and while the infirmary cases have first call upon an institution, especially such cases whose home environment is such as to be totally inadequate to the giving of that care and attention their helplessness calls for, still we shall fail in our task if we do not make provision for the care and training of that no less mentally defective but higher grade child—the type who is being reported from our schools as “suspected mentally defective”; who cannot profit from our public school along lines peculiarly adapted to his degree of mental capacity. These are to be of our future citizens, and to the extent we fail in our effort to equip them, to that extent we encourage the lowering of our general standards of citizenship. In the work at Oliver, it will be the chief aim of the Superintendent and staff to not only provide efficient care for the helpless idiot and imbecile, but to ever keep in mind this more important class—the high-grade imbecile and moron. It is upon the effort which we put forth to help him, and upon the result of that effort that our Training School for mental deficiency will be judged by those who realize the social problem mental deficiency is, and who appreciate its far reaching deleterious effect upon society to-day.

Great credit is due the Department of Education for the initiation of this branch of public service, for the efforts put forth by it in public education, and for the mental hygiene survey of the province in 1921. I feel convinced that it is still vitally interested, and while the responsibility has passed from it to the Department of Public Health, and while the latter Department is keenly alive to that responsibility, we need the co-operation of the Educational authorities as well as the co-operation of all public, social, and philanthropic bodies in the launching of any province-wide scheme tending towards the education of the public and the effective handling of such problems as mental deficiency, moral delinquency, pauperism, vice and crime.

Our duty as an institution is to show cause for our existence as such for the year 1923, and in our effort we feel we have the sympathy and shall have the active support of the Minister of Public Health and of his Department of which the Provincial Training School for mental deficiency at Oliver and the South Side Home is a part.

Respectfully submitted,

W. J. McALISTER, M.D.,
Superintendent.

ANNUAL REPORT OF MEDICAL SUPERINTENDENT OF PROVINCIAL MENTAL HOSPITAL

SIR,—

I have the honour to submit to you the Report for the year ending 31st December, 1922, being the Twelfth Annual Report of the Provincial Mental Hospital, Ponoka.

On the first day of January, 1922, there were in residence 776 patients, 496 males and 280 females. At the close of the year, there were 812 patients, 512 males and 300 females, an apparent increase of only 36. The real increase, however, was 58, viz.: 38 males and 20 females, as 22 males were transferred during the year to the Hospital for Returned Soldiers, Red Deer.

The admissions were 163 males and 90 females, a total of 253.

The discharges were 147, as follows:—

	Male	Female	Total
Recovered	50	35	85
Improved	28	16	44
Not Improved	13	5	18
Total	91	56	147

The above discharges include 8 deportations and 4 transfers, as follows:—

DEPORTATIONS

	Male	Female	Total
China	2	—	2
England	—	1	1
Ireland	1	—	1
Sweden	1	—	1
United States	3	—	3
Total	7	1	8

TRANSFERS

	Male	Female	Total
Brandon	1	—	1
Daysland	1	—	1
Kingston Penitentiary (Ont.)	—	1	1
Prince Albert Penitentiary (Sask.)	1	—	1
Total	3	1	4

During the year, 81 males and 54 females, a total of 135, were sent out on probation, and of the total number thus discharged, 5 males and 1 female were returned.

The recovery rate, based on the total admissions for the year, is in the case of the males, 30.67 per cent., and in that of the females, 38.88 per cent. The recovery rate, therefore, is for both sexes, 33.59 per cent.

The deaths numbered 55, viz.: 39 males and 16 females. The death rate, based on the total number under treatment, is for the males, 5.91 per cent., and for the females, 4.32 per cent., or for both sexes, 5.34 per cent.

With the exception of simple ailments and a few cases of erysipelas and diphtheria, the general health of both staff and patients has been satisfactory.

One case of typhoid fever, probably contracted at Claresholm, occurred in an employee who made a good recovery.

There are only three cases of active pulmonary tuberculosis in the Hospital at the present time. If Table No. 14 be referred to, it will be noted that three deaths are attributable to tuberculosis and a fourth in which tuberculosis was a factor.

Table No. 12 shows that the psychoses Dementia Praecox and Manic-Depressive Insanity were responsible for 129 cases, or, approximately 51 per cent., of the admissions, syphilis for over 6 per cent., and alcohol for slightly more than 4 per cent. It is interesting to note that a history of alcoholic heredity was obtained in 18 per cent. of the cases.

Since disorders of the teeth are recognized to be important contributory factors in many of the psychoses, it was decided that the care of the teeth should be placed on an organized basis, and it was arranged with Dr. George E. Budd, of Ponoka, to visit the Hospital two days a week.

During the year, 5,962 articles, including dresses, aprons, sheets, pillow cases, etc., were made in the sewing room, where an average of 12 female patients are employed daily. In addition, 608 articles for general use were also made in the wards. The above does not include the numerous pieces of fancy work completed in the wards, where it is the rule to encourage all patients, particularly on the female side, to occupy themselves in some useful work suitable to their mental state.

A very successful bazaar, the first of its kind, was held in the Nurses' Home early in December, and there was a good attendance from far and near. The articles of attire and fancy work, etc., all of which were made in the Hospital, were attractively arranged on stalls, and found ready purchasers.

Each week approximately 9,000 pieces pass through the laundry. This number is steadily increasing, and the work is seriously handicapped for the want of more room and some additional machinery, a matter which will be again referred to in the recommendations.

Progress has been made in instituting a department of occupational therapy by the engagement of Miss C. C. Dingman for a few months, her duties to commence on January 2nd. Two large rooms, next to the operating theatre on the third floor of the Main Building, have been set aside for that purpose, and it is proposed to train certain employees to assist in carrying on the work in the wards.

On January 1st, Mr. L. B. Browne was appointed Bursar and Business Manager, and in addition to purchasing the supplies, has devoted much time and consideration during the year in placing the business of the Hospital on a more practical and efficient basis.

On July 1st, Mr. T. A. P. Frost began his duties as Provincial Psychiatric Investigator, and the services he has rendered have so far justified the expenditure. His time is divided between the Department of Public Health and the Administrator of Lunatics' Estates, in collecting clinical data, enquiring into the property of patients, and as far as possible following up the discharged.

The Nurses' Home, an up to date and modern building, which was completed in February, and is now fully occupied has added materially to the general comfort and happiness of the female staff.

A new unit to accommodate 200 male patients and a dining-room to seat a similar number are now being constructed and should be completed in the spring. The same general plan, with improvements, as the preceding building has been adopted. It must be borne in mind that this year it will be necessary to use the increased accommodation thus afforded, not only for the average annual increase in male patients (about 75), but for the male patients (about 50) who must of necessity be moved from one of the wards in the Main Building, in order to provide for the increase in the female patients, the present accommodation for whom is now becoming seriously limited.

A cottage for one of the married physicians and a double cottage for other employees are also under construction.

The new cow barns and horse barns have been completed. The old cow barn was demolished, and the old horse barn has been moved to a site a short distance to the east of the present buildings. About 140 gallons of milk are sent into the Hospital daily, and meet our present requirements.

As compared with this time last year, the supply of eggs from the farm is much more satisfactory, owing to the adoption of more scientific methods of egg production. The flock of White Leghorn chickens bought during the summer are now laying at the rate of about 180 eggs a day, and while this number is sufficient for our immediate requirements, it is still far short of the original plan of providing 400 to 500 eggs a day.

Notwithstanding unfavourable conditions, progress was made in improving the grounds in front of the Hospital. Particular attention was given to the watering of the flowers, and, in the circumstances, the results were exceptionally good, and drew much favourable comment from visitors. In addition to pot plants for the wards, seedlings for the flower garden, several crops of lettuce and half a bench each of carnations and chrysanthemums, over half a ton of tomatoes of excellent quality was grown in the greenhouse. In consideration of the limited space at the disposal of the gardener, this was a very creditable performance.

There was a plentiful supply of vegetables of all kinds during the summer, and, with the exception of the onions, the quality was good, the celery and carrots being worthy of special mention. Owing to the dry season, however, the crop, as a whole, was light, but with care there are enough vegetables to carry on until March or April.

The Power House has been enlarged; two new Babcock & Wilcox boilers, and a turbine generator have been installed, and some of the

existing machinery re-arranged, making for greater economy and efficiency. In order to meet the increasing demands of the Hospital for water, and to allow of a surplus for emergencies, a fourth well is now being drilled close to the south end of the Reservoir.

RECOMMENDATIONS.

RECREATION HALL.—The want of a Recreation Hall for patients and staff is keenly felt by all. The large room in the basement, hitherto in use for that purpose, has been converted into a dormitory on account of the limited sleeping accommodation for the women. There is now no suitable place where the patients and staff can meet for musical entertainments, card parties, dancing, etc., and we would urge that this matter be given every consideration. A hall similar to that provided in other Western institutions would be the most appropriate type of building, and for obvious reasons, should be connected with the corridor system.

LAUNDRY.—As already stated more room and some additional machinery is needed in the laundry. It is recommended that the gymnasium be connected by a stairway with the present ironing room immediately above it, and used as a sorting and additional ironing room. A third extractor should be installed in the wash room as the two in use cannot cope with the pressure of work, and articles are sent into the ironing room insufficiently extracted. The large ironer is taxed beyond its capacity, and to meet this difficulty a small ironer should be provided for pillow-slips, towels, dresses, etc. A collar machine, damper, shaper and glosser, as well as a shirt ironer, are also necessary in order that a greater volume of work of better quality may be turned out each working day.

COTTAGES.—A careful survey shows that more cottages for married employees are urgently needed, and, to meet the minimum requirements, the construction of two double cottages as well as another doctor's residence is to be strongly recommended.

GREENHOUSE.—The space available in the greenhouse is no longer sufficient to meet the requirements of the Hospital in pot plants, cut flowers, and seedlings for the vegetable and flower gardens, and, in order that the good work now being done be not seriously handicapped, the erection of another greenhouse alongside the present one is to be recommended.

ROOT-HOUSE.—For some time past the need of a suitable place for safely storing garden vegetables (of prime importance in our dietary) has been felt, and it is recommended that this matter be given due consideration. Experience has shown that root-houses constructed of timber soon deteriorate and are uneconomical. It is, therefore, suggested that a root-house of sufficient size be constructed of concrete in the high and well-drained ground immediately to the east of the reservoir, and, since onions keep best in a cool, dry atmosphere, a room for the storage of these might well be built above the root-house, and, if practicable, heated sufficiently to prevent freezing, with the waste steam from the reservoir.

In concluding, we desire to express our indebtedness to the various departments for their support and assistance.

I have the honour to be, Sir,

Your obedient servant,

E. H. COOKE,

Medical Superintendent.

TABLE NO. 1.

Showing the number of Admissions, Discharges, and Deaths during 1922.

Month	Admissions			Discharges			Deaths		
	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total
January	10	8	18	5	3	8	3	2	5
February	20	9	29	1	2	3	6	---	6
March	14	3	17	7	5	12	3	2	5
April	7	11	18	13	7	20	4	1	5
May	14	6	20	9	6	15	4	---	4
June	24	15	39	6	1	7	2	---	2
July	16	6	22	12	8	20	3	3	6
August	14	6	20	12	7	19	2	1	3
September	13	8	21	5	5	10	4	1	5
October	11	7	18	3	4	7	2	2	4
November	7	5	12	4	2	6	3	1	4
December	13	6	19	14	6	20	3	3	6
Total	163	90	253	91	56	147	39	16	55

TABLE NO. 2.

Showing the civil state of patients admitted during 1922.

Civil State	Male	Female	Total
Single	89	18	107
Married	59	66	125
Widowed	11	6	17
Divorced	4	---	4
Total	163	90	253

TABLE NO. 3.

Showing the religious denomination of those admitted during 1922.

Religious Denomination	Male	Female	Total
Anglican	30	20	50
Baptist	10	2	12
Brethren in Christ	---	1	1
Carmelite	1	---	1
Christian Scientist	---	1	1
Confucian	2	---	2
Congregationalist	1	---	1
Church of Christ	5	2	7
Greek Church	8	3	11
Jewish	1	---	1
Lutheran	15	6	21
Methodist	14	14	28
Mormon	1	2	3
Other Protestants	1	---	1
Presbyterians	31	17	48
Roman Catholic	42	21	63
Salvation Army	---	1	1
Unitarian	1	---	1
Total	163	90	253

TABLE No. 4.

Showing the degree of education of those admitted during 1922.

Degree of Education	Male	Female	Total
Superior	9	11	20
Common School	146	71	217
None	8	8	16
Total	163	90	253

TABLE No. 5.

Showing the nationality of those admitted during 1922.

Nationality	Male	Female	Total
Austria	3	4	7
Belgium	2	---	2
Canada	45	32	77
Czecho-Slovakia	1	---	1
China	2	---	2
Denmark	---	2	2
England	24	24	48
France	4	---	4
Galicia	3	---	3
Germany	2	---	2
Italy	2	1	3
Ireland	4	---	4
Japan	1	---	1
Malta	1	---	1
New Zealand	1	---	1
Norway	6	---	6
Poland	7	1	8
Russia	5	3	8
Sweden	3	---	3
Switzerland	---	1	1
Scotland	13	5	18
United States	32	17	49
Wales	2	---	2
Total	163	90	253

TABLE NO. 6.

Showing the occupation of those admitted during 1922.

Occupation	Male	Female	Total
Advertising Agent.....	1	---	1
Auto Mechanic	1	---	1
Baker	1	---	1
Barber.....	2	---	2
Book-keeper.....	---	1	1
Box-maker	1	---	1
Caretaker	1	---	1
Carpenter	4	---	4
Clergyman	1	---	1
Clerk, Bank	1	---	1
Clerk, Dry Goods	1	2	3
Clerk, Grocery	1	---	1
Clerk, Railway	1	---	1
Cook.....	1	---	1
Dyer & Cleaner	1	---	1
Electrician	1	---	1
Farmer	57	---	57
Fireman	1	---	1
Furniture Polisher	2	---	2
Home	2	9	11
Hostler	1	---	1
Housekeeper	---	4	4
Housewife.....	---	69	69
Labourer.....	57	---	57
Laundryman	1	---	1
Lumber Scaler	1	---	1
Machinist	1	---	1
Maid	---	2	2
Miner	3	---	3
Moulder	1	---	1
None	---	1	1
Painter & Decorator.....	1	---	1
Presser	1	---	1
Physician	1	---	1
Photographer	1	---	1
Prospector	1	---	1
Ranch Manager	1	---	1
Real Estate Agent	1	---	1
Retired.....	3	---	3
Steam Fitter	1	---	1
Shipper	1	---	1
School Teacher	---	2	2
Trapper	1	---	1
Taxi Driver	1	---	1
Teamster	2	---	2
Waiter.....	1	---	1
Total	163	90	253

TABLE NO. 7.

Showing the ages of those admitted during 1922.

Ages	Male	Female	Total
15 to 20.....	4	6	10
20 to 25.....	20	9	29
25 to 30.....	22	11	33
30 to 35.....	27	14	41
35 to 40.....	17	17	34
40 to 45.....	13	11	24
45 to 50.....	22	9	31
50 to 55.....	17	7	24
55 to 60.....	8	1	9
60 to 65.....	6	1	7
65 to 70.....	4	2	6
70 to 75.....	3	2	5
Total	163	90	253

TABLE NO. 8.

Showing statistics of heredity in those admitted during 1922.

Heredity	Male	Female	Total
Paternal Branch	43	16	59
Maternal Branch	21	12	33
Paternal or Maternal	34	29	63
Said not to be Heredity	41	21	62
History Insufficient	24	12	36
Total	163	90	253

TABLE NO. 9.

Showing the alleged causes of the attack of insanity, 1922.

Alleged Causes	Male	Female	Total
Active Service	1	----	1
Alcohol	10	2	12
Cancer	1	----	1
Cardiac Disease	1	----	1
Cardio-vascular Degeneration	2	1	3
Catarrhal Jaundice	1	----	1
Child-bearing	----	3	3
Child-birth	----	8	8
Constitutional Psychopathic Inferiority	8	----	8
Chronic Interstitial Nephritis	1	----	1
Chorea, Huntington's	----	1	1
Epilepsy	7	5	12
Heredity	48	36	84
Heredity, Alcoholic	33	14	47
Heredity, Epileptic	1	2	3
Heredity, Suspected	53	30	83
Ill-health	7	3	10
Isolation	3	1	4
Influenza	----	6	6
Injury to Head	7	----	7
Love Affair	1	1	2
Mental Deficiency	8	1	9
Mental Stress, prolonged	11	9	20
Mental Stress, sudden	1	3	4
Menopause	----	2	2
Morphia	1	1	2
Not known	13	3	16
Paralysis Agitans	----	1	1
Pneumonia	2	3	5
Pulmonary Abscess	1	----	1
Operation	2	4	6
Overwork	4	----	4
Overstudy	----	1	1
Pregnancy	----	1	1
Senility	5	2	7
Sense-deprivation	1	1	2
Syphilis	16	----	16

TABLE NO. 10.

Showing the form of mental disorder in those admitted during 1922.

Form of Disorder	Male	Female	Total
1. TRAUMATIC PSYCHOSES:			
(a) Traumatic Constitution	2	---	2
(b) Post-traumatic Mental Enfeeblement	1	---	1
2. SENILE PSYCHOSES:			
(a) Deterioration	1	---	1
(b) Presbyophrenic type	2	1	3
(c) Delirious and confused states	1	---	1
(d) Depressed and agitated states with deterioration ..	1	---	1
(e) Paranoid types	1	1	2
3. PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS	1	---	1
4. GENERAL PARALYSIS	14	---	14
5. PSYCHOSES WITH CEREBRAL SYPHILIS	2	---	2
6. PSYCHOSES WITH HUNTINGTON'S CHOREA	---	1	1
7. ALCOHOLIC PSYCHOSES:			
(a) Pathological Intoxication	2	---	2
(b) Korsakow's Psychosis	---	1	1
(c) Acute Hallucinosiis	3	---	3
(d) Acute Paranoid type	1	1	2
(e) Alcoholic Deterioration	3	---	3
8. PSYCHOSES WITH OTHER SOMATIC DISEASES:			
(a) Exhaustion Delirium	6	5	11
(b) Delirium of Unknown Origin	5	5	10
(c) Cardio-renal Disease	1	---	1
(d) Other Diseases or Conditions:			
(I.) Catarrhal Jaundice	1	---	1
(II.) Bronchiectasis	1	---	1
(III.) Paralysis Agitans	---	1	1
(IV.) Carcinoma of Stomach	1	---	1
9. MANIC DEPRESSIVE PSYCHOSES:			
(a) Manic type	23	25	48
(b) Depressive type	7	4	11
(c) Stupor	---	---	---
(d) Mixed type	1	3	4
10. INVOLUTIONAL MELANCHOLIA	---	2	2
11. DEMENTIA PRAECOX:			
(a) Paranoid	10	2	12
(b) Catatonic	7	12	19
(c) Hebephrenic	22	11	33
12. PARANOIA OR PARANOIC CONDITIONS	14	6	20
13. PSYCHONEUROSES AND NEUROSES:			
(a) Hysteric (Suggestive)	2	---	2
(b) Psychasthenic	---	1	1
(c) Neurasthenic	1	---	1
14. PSYCHOSES WITH MENTAL DEFICIENCY	4	1	5
15. PSYCHOSES WITH CONSTITUTIONAL PSYCHOPATHIC INFERIORITY	5	---	5
Forward	146	83	229

TABLE NO. 10—*Continued.*

Form of Disorder	Male	Female	Total
Brought forward.....	146	83	229
16. EPILEPTIC PSYCHOSES:			
(a) Deterioration	3	5	8
(b) Clouded	6	---	6
(c) Other Conditions:			
Traumatic	1	---	1
17. NOT INSANE:			
(a) Epilepsy without Psychosis.....	---	1	1
(b) Constitutional Psychopathic Inferiority with- out Psychosis	2	---	2
(c) Mental Deficiency without Psychosis	4	---	4
(d) Injury to Head without Psychosis	1	---	1
(e) Violent temper without Psychosis	---	1	1
Total	163	90	253

TABLE NO. 11.

Showing number allowed out on probation and results in 1922.

	Male	Female	Total
Discharged, Recovered	48	34	82
Discharged, Improved	24	16	40
Discharged, Not Improved	9	4	13
Returned to Hospital	5	1	6
Still out at close of year	42	31	74

ANNUAL REPORT OF MEDICAL SUPERINTENDENT OF THE HOSPITAL FOR RETURNED SOLDIERS
(RED DEER, ALBERTA)

SIR,—

I have the honour to submit herewith the Annual Report for the year 1922, being the fifth Annual Report for the Hospital for Returned Soldiers, Red Deer. The usual statistical tables are attached.

On the first of January, 1922, there were 96 male patients in residence. During the year there were 22 admitted as transfers from the Provincial Mental Hospital, Ponoka. Discharges numbered 6. Transfers to other Provincial Hospitals, 1. Deportations, 4, and Deaths, 1. Total remaining in Hospital, December 31st, 1922, 106.

The general health of the patients throughout the year has been exceptionally good.

The interior of the building is in the process of being painted and decorated, and has added much to the comfort and cheer of patients and staff. Radical changes in the kitchen and pantry from wood to tiled floor and walls have greatly improved general appearances, as well as making sanitary arrangements up to date.

Our water supply which for so long proved a source of worry has been effectually remedied by the installation of a motor centrifugal pump on our property at a point where water at any hour of the day can be boosted to our high-pressure tank.

Building upon a foundation laid some years ago, the grounds have shown their yearly improvement in design and beauty. This has been accomplished through special work of the outside staff, and has received much favorable comment through the public press. The garden has again shown the fifth consecutive success. There is an abundance of all kinds of garden truck for Hospital use, and much for sale.

Details of work accomplished, stock and inventory records will be found under their respective headings.

Government policy has necessitated splitting the Summary Report into two sections.—Public Health and Public Works. Classes of expenditures and receipt appear in their respective divisions.

The net per capita cost is based on total expenditures of Public Health and Public Works, less total credits.

As will be noticed, the net per capita cost has been reduced from \$1.10 to \$1.00 per day.

In conclusion, the staff wish to convey to the various departments their sincere thanks for the support and assistance rendered.

I have the honour to be, Sir,

Your obedient Servant,

D. G. DICK,
Medical Superintendent.

TABLE SHOWING ADMISSIONS, TRANSFERS, PROBATIONS, DEPORTATIONS, AND DEATHS FOR THE YEAR 1922.

Month	Admissions			Transfers			Probations			Deportations			Deaths		
	Soldier	Civil	Total	Soldier	Civil	Total	Soldier	Civil	Total	Soldier	Civil	Total	Soldier	Civil	Total
January	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1
April	---	---	---	---	---	---	---	---	---	1	---	1	---	---	---
May	1	13	14	1	---	1	---	---	---	---	1	1	---	---	---
June	---	---	---	---	---	---	2	2	4	---	1	1	---	---	---
July	1	6	7	---	---	---	---	---	---	---	---	---	---	---	---
August	---	---	---	---	---	---	---	2	2	---	---	---	---	---	---
September	---	1	1	---	---	---	---	---	---	---	1	1	---	---	---
Total	2	20	22	1	---	1	2	4	6	1	3	4	1	---	1

TABLE SHOWING THE DEGREE OF EDUCATION OF THOSE ADMITTED DURING 1922.

Superior	2
Common School	19
Poor	1
Total	22

TABLE SHOWING THE NUMBER ALLOWED ON PROBATION AND RESULTS IN 1922.

Discharged: Recovered	0
Improved	6
Unimproved	0
Returned	0
Total	6

TABLE SHOWING THE CIVIL STATE OF PATIENTS ADMITTED DURING YEAR 1922.

Married	6
Single	16
Total	22

TABLE SHOWING RELIGIOUS DENOMINATIONS OF THOSE ADMITTED DURING 1922.

Church of England	9
Presbyterian	6
Roman Catholic	4
Baptist	2
Jewish	1
Total	22

TABLE SHOWING NATIONALITY OF THOSE ADMITTED IN 1922.

English	7	French	1
Scotch	5	Canadian	4
Irish	1	American	2
Welsh	1	Austrian	1

TABLE SHOWING RECORD OF DEATHS IN 1922.

Cowe, Daniel—Age 36 Yrs. Time in Hospital, 3 yrs., 3 mths., 8 days.
Cause of death, G. P. I.

